MAKE RACING AWESOME AGAIN!

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BACKGROUND: This document is an effort to offer my views on the current state of Motorsport, and Formula One in particular. For some time now, and for whatever reason, there seem to be a lot of negative comments and chatter from the people inside the business as well as from the fans all over the world.

Why is that? How did we arrive at this situation from a time not that long ago when things were seemingly mostly positive, viewership was huge, the cars were fast and spectacular to watch, we had some great personalities in the paddock, superstar drivers racing the cars and plenty of action and drama on the race track, both between the teams and the drivers. Money was flowing into the business and global corporate sponsors as well as manufacturers were all lining up to be part of the show. Teams were selling at a huge premium and everyone involved in the business was prospering.

Of course, there is not a simple answer to any of this. For sure, the majority of negative comments today is in part due to easy media accessibility for all, but it seems to me there are real elements of concern in the sport and they have arisen from a gradual process of poor decisions. In some cases on the technical side, knee jerk decisions based on either a bad accident, complaints from the fans and media about the racing not being good enough; in other cases, based on pressure from certain teams or manufacturers in order to keep them in the championship; and finally, but very importantly, a level of political correctness has crept in that, at least in my opinion, has done nothing to make the racing any better on any level, but has instead only contributed to pushing the costs through the roof and created a greater division between the teams, and, as such, made the racing too predictable and less interesting to watch. As a result of all this, the technology has evolved to where we are today, and most importantly, was allowed to evolve to a point where the budgets suddenly went into the stratosphere.

At the same time, the business model for the commercial rights holders have changed dramatically since the introduction of pay-per-view instead of terrestrial TV, which means that there is (theoretically) more revenue, even if derived from significantly fewer viewers. The byproduct of this is that there is less interest

for sponsors to spend big money as their metrics are primarily based on the number of eyeballs watching, and in particular, eyeballs in places where the demographics support purchase of the sponsors' products – not all eyeballs are created equally in the minds of the sponsor – Unilever and Heineken differentiate between reaching eyeballs in Azerbaijan versus Germany and the US. In addition, there are now a number of different viewing platforms besides TV, which is causing even more confusion and a hard to quantify environment for companies to select the best strategy to market their products. The challenge the series and the teams are now facing is how to grow or even just maintain their eco system.

So, as a result of there currently being a less attractive return-on-investment proposition for the global sponsor, we now have a situation where every team is more or less wholly dependent on the money they receive from the series, i.e. from the FOM, as this represents the bulk of their income. This was never the case before, when major sponsors were the main contributors and the money the teams received from the series was almost the icing on the cake, especially if they did well. Hence, there are now several teams racing without a main sponsor, or if they do have one, it's for a fraction of what a title sponsor used to pay.

Through all these various rule changes that have occurred in recent years I have a feeling that Formula One has somehow lost its identity and I am not sure anyone, whether it's the FIA or Liberty (FOM), really know what Formula One stands for anymore. I believe we are now at a point where another two or maybe three decisions in the wrong direction could spell the end of F1 as we know it. People are already tuning out because they have either lost interest or it's too predictable or not exciting enough or whatever the reason may be. The younger generation doesn't seem to care, F1 and motorsport in general is struggling to catch their attention. I challenge anyone to define in 3 words what F1 stands for today.

In order to arrive at a situation that has the right balance between ECONOMICS, COMPETITION, ENTERTAINMENT and RELEVANCE - it's important to first identify the individual areas that matter the most and focus on getting these right and at the same time eliminate the areas that matters the least.

I will first attempt to identify the areas that I feel are important and will then go into more detail on each individual item and come up with what I believe could be a solution, or at least open the door for a debate or dialogue in order to find the best way forward.

ECONOMICS:

BACKGROUND: There's been talk for some time now about various ways to bring the costs down, but no decisions have been made on how to achieve this. In the meantime, the costs are gradually creeping up every year and it's now gotten to the point that even the world's largest automotive manufacturers and the largest corporate sponsors are reluctant to compete in Formula One. This being the case, the cost to compete is so high, so prohibitively expensive, that it serves as a barrier to those who would naturally be and traditionally have been involved in the sport. It's been clear to everyone for some time now that the costs are unsustainable under the current set of rules.

The major cost is in the constant development war, with the aerodynamics and the power units being the largest contributors of excessive expense for the teams and the engine manufacturers. Despite efforts to curb the costs through various sets of rules, such as limitations on the number of engines and gearboxes used in a season, all it seems to have done is the exact opposite and in fact driven the costs of producing these units much higher. The cost of manufacturing an already developed engine or gearbox is not that expensive in the overall scheme of things, but the cost of developing and manufacturing an engine that must last 1/3 of a season is extremely expensive and seemingly far outweighs the cost of using several engines during the course of the season

Adding the hybrid component to the powertrain has done more damage than all the other rule changes combined in my opinion. It seems that in order to meet the politically correct agenda that is now creeping in to every facet of life, it's somehow been decided that this is the future of automotive engineering and needs to be part of Formula One as well. Pushed by the manufacturers (under the premise of wanting the formula to have relevance to the manufacturer's production lineup) who put pressure on the FIA, Formula One had to follow, along with the WEC. Interestingly, both series are now completely controlled and dominated by the OEM's and would not survive in their current formats without the money being poured in by the manufacturers competing. The privateer or independent teams are now just the clowns that make up the show in both series and have no realistic chance of ever winning a race. So, this means we are stuck with three teams in F1 and currently only one team in the WEC that have any chance of winning. This seems an incredibly high trade off just to be doing the politically correct thing. By introducing this rule and subsequently allowing the manufacturers to effectively take control of both series, it will take some major undoing to get things back on the right track again. What we have now is an engine formula that is turning manufacturers away rather than inviting them to join, which is a very dangerous path. As we all know from past experiences, it's only a matter of a board decision for any manufacturer, except Ferrari, to stop any racing program if it doesn't suit their purpose for whatever reason. None of them have any real emotional attachment to racing, which has been shown by Toyota, Honda and BMW who all pulled out of F1 within a few years of each other.

I strongly believe that the current concept of race car design needs a complete reset in almost every major category, but particularly in Formula One. There has been no real innovation since the discovery of aerodynamics. Every aspect of a current race car design always has the aero as the first priority, as this is what gives the most gain in lap-time by far. But as we all know, aside from making the car go faster, there are very few benefits from aerodynamics, if any. It's the #1 factor in driving the costs higher, it's the #1 factor in making the racing less interesting, it has no relevance aside from making the car go faster, yet it's been the primary focus in every single form of racing the past 30 years or more. It's time for a major reset. The cost of the development war is escalating every year and will continue to do so as long as aero is the prime factor in making the cars go faster.

Another contributing factor to the high cost is the fact that each team must build most components themselves rather than buying "off the shelf" components already manufactured and tested. A loose

interpretation of the old “B” team concept (using the parts and resources from another team that is legally allowed) has slowly crept in with teams like HAAS, Sauber (Alfa Romeo), Toro Rosso and Force India to some degree. Under the current set of rules this is by far a much better approach rather than trying to design, manufacture, test and run every single component yourself. We can clearly see the result of this where HAAS and Sauber (Alfa Romeo) are now consistently the “best of the rest” teams.

The result of this is that the “A” teams are starting to gather more and more control of the teams they are supporting, including the choice of drivers in some cases. The concern the midfield teams have is that if we are not careful the entire grid will be controlled by the major manufacturers and it will turn into another version of the DTM where three or maybe four manufacturers control the entire field with satellite teams that are under their complete control.

There has been much discussion about a cost cap, and how to implement it. I don’t believe you can ever entirely control a fixed cost cap because teams will always find a way to circumvent a rule like that. The most effective way in my opinion is to limit the development in all the key areas on the cars that are irrelevant in the bigger picture. There are many areas or components on a car that I believe could be standardized and no one would even know or notice the difference. This would have the same or similar effect to the “B” team concept, but it would be the same for everybody, and it would automatically level the playing field in the process. Some of these areas are:

- **AERODYNAMICS:**
    - Set a fixed limit on maximum downforce (more details to follow in the chapter of Competition). This will eliminate the massive spend on aero development that is currently by far the biggest line item in the budget.
    - No aero add-ons allowed on any surface parts of the car. This will still allow for each team to design a car that is unique looking and will have its own interpretation of the rules, but the emphasis will shift away from purely being made to optimize aerodynamic downforce, and instead shift to other areas that will be of equal importance.

  By having a fixed limit on downforce, it will stop teams spending time and money on constantly finding different avenues on aero development in order to gain back the original loss. If the amount of downforce is always fixed, they will be forced to look in different areas to get more performance out of the car. This will drastically reduce the budgets as a large majority of the R&D budget is spent on the never-ending aero development war.

- **FRONT WING:** Provide a standard front wing issued by the FIA (no one can tell the difference anyway so it really wouldn’t matter). Even Adrian Newey agrees that if you painted all the wings white and put them next to each other no one would know what wing belong to what car. A large portion of the aero budget would go away if the front wings were fixed and the same for all the teams, supplied by one manufacturer chosen by the FIA. As there is no innovation involved in any

aspect of this because of the way the rules are written, it is purely a matter of optimizing to the umpteenth degree. Whoever has the most resources will eventually gain an edge, and the money being spent on this entirely worthless endeavor is just mindboggling.

- **BRAKES:** To put things in perspective, a top F1 team's brake budget is nearly equivalent to a winning IndyCar full season budget. No one can see or relate to the insanely complicated brake ducting systems each team now must develop, all for nothing in the end. If they were all given the same brake system and brake ducts it would be the same for everyone and no one would even know. With the greatly reduced importance of downforce, it would make sense to go back to a simple brake system whose primary function is to stop the car, not to add more downforce or create more efficient aero.

- **MONOCOQUE**: The FIA should produce a standard tub for all the teams to use that fits their safety criteria and that's been crash tested by them. It's a very expensive and unnecessary cost to have every team design, build and then crash test their monocoques before the start of each season. It would make much more sense for the teams to build their engine, cooling and aero package around a tub that is being provided by the FIA at a fixed and reasonable cost. It would save a huge amount of money and again no one would know the difference. Whatever creativity goes into the design of the tub would simply shift to a different area. It may not be the ideal solution for every team and engine manufacturer, but so what. The tub has little relevance apart from bolting the engine, suspension and all the aero bits onto it.

- **ELECTRONICS AND DRIVER CONTROLS:** Implement standard electronics for all the teams. Eliminate most of the current adjustments on the steering wheel. Every button, dial and switch on the steering wheel ultimately leads to somewhere on the car, whether it's the diff, engine, brakes, steering or whatever. Assume then that each one of these functions requires a significant number of people to design, develop, build, test and maintain for each system. Rinse and repeat every race. The sheer manpower required to develop and maintain all these functions is staggering, and in the end, every team must do the same in varying degrees, and all it does is eliminate more and more skill elements in the driver's arsenal. This may be the most obvious area that needs to be addressed in order to make the racing a little less predictable and put the emphasis back on driver skills, and by doing so reduce the costs dramatically.

- **GEARBOX:** The gearbox on a current F1 car is a work of art, the engineering is simply mindboggling and the size of some the components are so small they almost look like a Swiss watch in certain areas. Then bear in mind that each team must design, build and maintain these gearboxes. It would be very easy to have one independent manufacturer build the same gearbox for all the cars, no one would know or indeed care. We are already at the point now where the "B" teams are using the complete backend of the "A" team they are associated with. This includes the gearbox, differential, rear suspension and electronics. It would bring the costs down massively if

everyone would just use the same gearbox, supplied by the FIA. It would also help level the playing field as this is one very costly component that has very little relevance to the overall importance of the package.

- **BAN ALL FORMS OF COMMUNICATION WITH THE FACTORY DURING RACE WEEKENDS:** This is another area which is completely and utterly unnecessary. I have seen the set-up from one of the top teams first hand and although it's incredibly impressive, it does absolutely nothing to add to overall package. Do we really need a team of 20-30 people at the base to assist the race team with set up and race strategy, including test drivers running intra-session set-up scenarios or overnight full-race simulations of various set-up alternatives? It's just another added cost that one team started and then everyone else had to follow. Why they did not nip this in the bud immediately is beyond me. It's only helping teams to optimize the set up and race strategy, and by doing so, taking another element of unpredictability away, again at a huge cost.

  WILL THESE CHANGES MAKE F1 LOOSE IT'S ORIGINAL DNA? F1 lost its original DNA a long time ago as far as I'm concerned. The original rule which was kind of the foundation of F1 and what made it different from almost every other category in racing was that "every team had to manufacture their own cars." The argument from the purists is that if we allow standard parts F1 will just become another form of IndyCar, where all the teams use the same chassis. If we are brutally honest, F1 is already at that point more or less due to the incredibly strict rules every team have to operate under. There is little room for innovation in any area under the current rules, so every team basically ends up doing the same thing, instead of just using a number of items that are supplied directly from the FIA at a fraction of the cost of having to manufacture every component themselves.

- **COST SAVINGS:** A very rough ballpark estimate of the potential savings from the suggested changes above would be somewhere in the region of $80-100M/year maybe a lot more than that for the top teams as their development would effectively stop in many areas. The breakdown would look something like this:

BRAKES:	**$ 5-7M**
AERO DEVELOPMENT:	**$30-40M**
MONOCOQUE:	**$ 3-5M**
FIXED FRONT WING:	**$10-15M**
GEARBOX:	**$10-15M**
ELECTRONICS:	**$ 5-7M**
POWER UNIT:	**$20-30M**

I'm not sure how many jobs these changes would eliminate, but it would be more than a few. Payroll is always one of the highest line items in the budgets. I understand and I am sympathetic that there will be many jobs lost due to these changes but like in any business, sometimes you need to change

to make things work. Car manufacturers are not afraid to shut down entire factories, with tens of thousands of jobs lost, if it doesn't fit whatever decisions they make at the time. Just because the teams have themselves gradually created a monster, in large part thanks to the manufacturers pouring crazy money into the series, and the governing body not recognizing this until it was too late to stop it, they are now faced with how to fix all this in order to ensure their long-term survival.

- **REVENUE FLOW**: The total payout from Liberty (FOM) to the teams over the past 3 years is averaging around $950M/year. This is then distributed through a complex formula among all the competing teams with a very complicated set of rules based on different tiers and how long each team has been competing, the importance of each team, and not insignificantly, what deal each team was able to cut with the old F1 owners when they needed some sort of concession. As things stand today, the FOM payout is heavily biased towards the top teams. Hardly any fans or followers of the sport are aware of how this works except the die-hard fans. It would be much fairer and also more interesting to the fans if a payout system was used that started with a fixed amount for each team. The total amount could be $500m ($50m/team). The remaining funds would be the official prize money paid out based on performance in each race, so a rough total of $450/year paid out over 21races. These number should be official, transparent and the same for each race. If the winner of each race, for arguments sake, get $5M, then there would be something to talk about. Money talks and people are intrigued about it, it's human nature and the way we are programmed. Why keep one of the key talking points for people a secret when it's already one of the highest payouts in sport and would create some excitement and intrigue amongst the fans. If we use a very simple formula that everyone can understand based on $200,000/point scored, the total payout for 2018 would look like this:

Mercedes	**655 points X $200,000**	**$131M+50M**	**TOTAL $181.0M**
Ferrari	**571**	**114M+50M**	**164.0M**
Red Bull	**419**	**83.6M+50M**	**136.6M**
Renault	**122**	**24.4M+50M**	**84.4M**
HAAS	**93**	**18.6M+50M**	**68.6M**
McLaren	**62**	**12.4M+50M**	**62.4M**
Force India	**52**	**10.4M+50M**	**60.4M**
Sauber	**48**	**9.6M+50M**	**59.6M**
Toro Rosso	**33**	**6.6M+50M**	**56.6M**
Williams	**7**	**1.4M+50M**	**51.4M**
TOTAL			**$925M**

In addition, there could be a $25m bonus for winning the championship, bringing the total payout to $950M.

With the proposed technical rule changes, there will be sufficient income for every team to operate and be fiscally sound. If they then wish to improve their competitiveness it is up to each team how hard they are willing to work to find more sponsors, hire better drivers and personnel – and there will still be a level of skill placed on spending money efficiently on the right things to bring the success each team aims for – whether it be winning the championship or having the nicest hospitality unit.

COMPETITION:

BACKGROUND: What I am proposing below are very radical changes that will require a complete reset philosophically on every level of how we go racing. Over time, the focus on downforce and aerodynamics have completely taken over every other aspect of racing to the point where it affects not only the car design (that only keeps growing each year on a massive scale), but also how every new race track is designed. Sadly, the end result is that the racing is getting more boring, with less passing as each year goes by, to the point where we instead have to come up with band-aid solutions to try and spice up the show by implementing artificial ways to pass such as the DRS device, and forcing the tire manufacturer to essentially produce an inferior product to make the racing a little less predictable. As we know, none of this has worked out very well. In addition, over time there's always been attempts at slowing the cars down either by reducing the horsepower and at one point they even went down the road of introducing treaded tires. Yet at no time has there even been a decision to stop the focus on aero development, except for tiny isolated solutions that have been minimally effective and only added to the overall cost each iteration of change.

Learning from other racing series can be extremely instructive as the same physics apply universally. IndyCar and NASCAR have in the past gone in the wrong direction by increasing aero grip, only to find out it was a huge, expensive mistake, and in each case backtracked to a less aero dependent package. If we count how many times there's been small changes to the aero rules to slow the cars down, or speed them up, or help the overtaking, or whatever the reason was each time, and then count the amount of money that was spent by each team, it's staggering. A perfect example is the 2019 rules, expected to cost each team an additional €15M and they likely won't make any difference whatsoever. Yet, not once has the problem been fixed, maybe masked it slightly for half a season before the teams catch up to where they were before. At some point the penny has to drop!

- **MASSIVE REDUCTION IN DOWNFORCE. REDUCE DOWNFORCE TO A LEVEL OF DRIVABILITY, BUT NOT MORE**: (**70% or more with most cars)** Obviously, the cars should always be safe to drive, and this will not be a problem. But beyond that, they should always be balanced on the edge of adhesion in both low and high-speed corners. By doing this there will be more emphasis on the drivers requiring the use of delicate car control and, in some corners, bravery will again make the difference. The engineering focus will shift more towards mechanical grip – to

the vehicle dynamics and tire performance to get back the lost grip from the limited aero downforce. The cars will be much more difficult to drive which will force teams to hire the best drivers available. Many of the great traditional tracks that have been outgrown by the current cars and become boring due to the massive downforce will again become interesting both from the driver's and the spectators' point of view. Someone recently suggested a drop of 40-50% downforce but I don't think it's enough to make the cars lose their aero sensitivity enough to be able to follow another car closely. The current F1 cars have such a huge amount of downforce that I believe a minimum 70% drop is required to reach the right target where the cars won't be fully dependent on aero for performance. The Turbo cars of the 80's had roughly 70% less downforce than the current cars, and they were already on the limit for being aero sensitive when you followed another car. With the current knowledge and technology, I think a lot of the sensitivity can be eliminated compared to back then, but it's a good indicator. And no one at the time considered those cars to be undrivable because they had too little downforce and too much power, we just wanted more, as you always do as a driver. But one thing was for certain, the cars were awesome to drive.

- **IMPLEMENT A FIXED MAXIMUM LEVEL OF DOWNFORCE**. In order to eliminate and enforce the overwhelming importance of aerodynamics on any current car design, there should be a fixed maximum level of downforce. This can be monitored real time from the strain gauges off the suspension pushrods. It will be no different than checking the engine parameters to make sure they are always within the legal parameters or the tire pressures or any of the other multitude of parameters that are currently monitored in real time. It will feed straight into the ECU along with all the other data being collected from the car while running. So, for example, if there are spikes on the boost level for more than a certain time, or the fuel flow, there will be a penalty, or perhaps the car will be disqualified. The same thing would apply to downforce levels. We have fixed limits on almost every other aspect on the cars today, so why not also on downforce. There are several different methods that can be applied on how to control this so there will be no room for interpretation or ways to cheat the system by the teams. It could either be controlled by a form of an active ride system, that would alter the ride height by small increments in microseconds once the maximum level is reached. The active ride system was already quite well developed in the early 90's, so with the current technology available, it would be a relatively easy system to implement. It could also be controlled from the front and rear wings or the rear diffuser, all with microsecond adjustments so the car would be safe to drive at all times. Once the research on how to best achieve a consistent and safe way to control this is under way, the right answer will be found very quickly. The FIA will then issue and manage the same system for each team.

- **SORT OUT THE DESIGN ELEMENTS SO THE CARS WILL LOOK ATTRACTIVE, AGGRESSIVE AND FAST:**
  By implementing the rule on maximum downforce, the current hideous front wings will be eliminated automatically and if the rule of standardized parts will be implemented there will be one front wing design for all the teams to use. No add on aero bits will be allowed on any of the car's surfaces. Any aero development will be more focused on drag and aero efficiency, which will then also

translate to road relevance eventually. As a result of this we will hopefully find a number of interesting and visually appealing solutions.

- **INCREASE POWER BY 30-40%, WITH A FORMULA BASED ON THERMAL EFFICIENCY AND ENERGY CONSUMPTION. ALLOW MORE FREEDOM TO EXPLORE NEW TECHNOLOGIES BASED ON THIS FORMULA:** Create a formula based on thermal efficiency and energy consumption that will have a maximum limit on how much energy a car can use for the duration of a Grand Prix. This will allow and hopefully encourage manufacturers to develop new technologies that is not restricted to the hybrid/internal combustion engine concept only, which is now the only option allowed. Everyone with even a basic interest in engineering knows that there are a number of far more interesting alternatives on engine technology than the electric/hybrid version that is currently the only option. This would truly open the door for F1 to genuinely be at the cutting edge of technology instead of constantly fine tuning a politically correct concept at a cost that is astronomical to everyone involved. Set a target of around 300-400HP increase in power as long as it can meet the energy consumption criteria, which will offset about 30% of the loss in lap-time from the reduction of downforce. By using this formula, it will eventually become apparent what energy source is actually the most environmentally friendly and efficient from a performance point of view. The immediate response I get when I mention this idea to anyone is that the manufacturers will never accept it and will leave instantly. If this is the case, F1 is doomed anyway. If there is one thing that is historically consistent in any form of motorsport, it's when the manufacturers end up controlling a championship, they will eventually screw it up or simply pull out when it doesn't suit their purpose any longer. Sometimes they then come back again when they've had a rethink (Honda most recent example), but there is zero loyalty or emotional engagement to the sport - for them it's purely business. If the current manufacturers don't like the idea for whatever reason, I am certain that there will be other manufacturers that would look at F1 very seriously if it had a more sensible set of rules that would allow for more innovation and had a lower barrier of entry than the current rules provide. Interestingly, there is not one senior executive from any car manufacturer that I have spoken to that is in favor of the electric concept, they all feel this is a political agenda that's been forced upon them.

- **NOISE**: If the rules are open for different alternatives on engine technology, we will again get back the engine noise as a factor in the overall experience. Fans can hear the difference between the different engine concepts and there will be very noisy engines and some that are not, but there will be something for everyone to relate to and talk about.

- **MORE POWER-HIGHER TOP SPEEDS-LESS DOWNFORCE-LONGER BRAKING DISTANCE-SLOWER CORNERING SPEEDS-MORE OVERTAKING.** With the massive reduction in downforce and a significant increase in horsepower we will see a huge increase in top speed, and as a result, much longer braking distances. This should radically improve the opportunities of

overtaking as the entry and mid-corner speeds will be significantly lower, which will again require the drivers to slow the cars down much earlier and a lot more before they turn in to the corners. The target should be somewhere close to 400kph in top speed, it will be super exciting to watch, and it will definitely give people something to talk about. It's hard for people to relate today when there are road cars with higher top speed and more horsepower than a Formula One car, no one cares or can appreciate that the F1cars are insanely fast in the slow and medium corners. We were close to the 400kph in some cases in the 80's with the turbo cars, at tracks that were infinitely more dangerous than any of the tracks are today, yet there were hardly ever any incidents except when a freak accident of some sort occurred, when something broke on the car for example. We need to get the "AWESOME" factor back somehow. With the added horsepower and less downforce, the cars will become beasts to drive and you will see the drivers really wrestling with the cars on exit and entry to the corners. I can guarantee that Lewis, Seb, Daniel, Max and all the rest of the top guys will love every moment of it, and it will automatically weed out the average guys as the teams will be forced to hire the best drivers they can.

- **WEIGHT REDUCTION:** Put more emphasis on weight reduction. With all the focus on the current electric vehicles being the future of not only motor racing but also road cars, the weight of all these cars has increased dramatically, due to the weight of the batteries and the systems to run them. A current F1 car is now 50% heavier than they used to be. At one point the weight limit was 500kg. As an example, 30kg equates to roughly 1 second in lap-time on an average lap of 1m30s. If there was an emphasis on weight reduction as well as an option on engine technology, based on my idea of a fixed amount of energy over the duration of a race distance, there would be some very interesting alternatives surfacing very quickly. And if a good portion of the money currently being spent on the endless and worthless aero development would instead be spent on material technologies and more efficient engine technologies, we would very soon find some very exciting alternatives that would eventually filter down to road relevance. Imagine if every car on the road weighed 30-40% less than the weight of a current car, how much would that save in fuel consumption and subsequently in emissions each year on a global scale? The results would be massive! It seems strange to me that all focus is on electrification when the gains from light weight cars would most likely outweigh the benefits from all electric vehicles, yet there seems to be almost no effort in this area. Road cars today are essentially made of the same materials they were in the early 1900's, surely with some effort there has to be a lighter, safer and cheaper alternative. There are already materials in existence, both alloys and composite materials that could be implemented, and if there was more focus in this area it would not be long before we would see some incredibly light and strong materials surface that would also eventually be cost effective enough to use for production vehicles. I refuse to believe there are no better alternatives than what is currently being used.

- **TIRES: IMPROVE TIRE TECHNOLOGY, WIDER TIRES AND BIGGER DIAMETER.** Another by-

product of the high downforce cars is the current generation of tires. For years, Pirelli has been forced to make a tire that is purposefully poor in performance just to slow the cars down or "make the racing more interesting" since it's nearly impossible to pass when you follow another car due to the turbulence and the highly sensitive aero on today's cars. None of this has worked out very well as we can witness every weekend watching any form of racing with aero-dependent cars. In order to offset the reduction in down force, the tires could very easily be made to have significantly more grip and durability. It's almost comical that every weekend teams at the highest level get caught out with the tires not working at their optimal level. Teams spend $100's of millions on aero development and engine development, yet on the day, they lose races because the tire pressures were off or the temps didn't come up their optimal working range, or the fronts didn't heat up as quick as the rears or whatever. Literally, most races are won or lost depending on how the teams make their tires work. So why isn't there more focus on the tires in the overall performance of the car from the outset? There are chassis and engine manufacturers competing fiercely against each other, why not allow the tire manufacturers to do the same. Aside from the driver, there are three things that make a car go fast or slow: engine, chassis and the tires. And the tires are at least equally important to the overall performance of the car as the chassis or the engine. If they would open up the rules and allow more than one tire manufacturer, we would very quickly see a dramatic increase in speed and lap times. This would also be by far the easiest and also cheapest way for the teams to get better performance as the tire companies would pour money into development and marketing. Tires have always and will always be the cheapest and easiest way to get more performance out of a race car. Like I already mentioned, teams spend millions in almost every category of racing on aero, chassis and engine development to gain an extra second in lap-times, yet you can bolt on a set of tires that cost $3,000 and gain far more than that by just having a different compound or construction in the tire. Tires are by a huge margin the cheapest way to gain performance.

- **ALLOW MORE THAN ONE TIRE MANUFACTURER TO COMPETE:** There are at least four tire companies I can think of today that would look at F1 very seriously if the rules were changed to reflect a more modern style tire. Each of these companies is already spending considerable amounts of money in other forms of motorsport, both on development and team support. If they were to engage in F1, we would see benefits not only on the competition side, but also in marketing and development as they would all spend significant money to promote their products through F1. This would help the series; the teams and the entire eco-system would grow accordingly.

- **18" RIMS TO CORRELATE TO ROAD CAR TECHNOLOGY:** All other forms of racing except F1 have by now adapted to the more modern, low-profile size of tire versus the mandated 13" rim that has been part of F1 for nearly 50yrs. F1 has been slow to adapt as it would interfere to much with the current aero packages, and as it's the engineers that now write the rules, this idea has been shut down every time it arises. If there's a wholesale rule change on aero reduction, this would be

the perfect time to switch to the bigger diameter wheel and tire to make the tires more relevant to tire manufacturers high-performance road tire production, make the cars look more relevant to current road car design, and it will make the cars look far better from a pure aesthetic point of view rather than the image created by these silly looking little balloon tires they are currently running on. If F1 claim that they are on the cutting edge of technology and that it's important to have some level of road relevance, you'd think one of the first things they would move away from are tires that have not been seen on any road car since the late 70's!

- SUMMARY OF PROPOSED CHANGES: To summarize these changes and how they will relate in overall performance, I've provided a "ball-park" guess at the loss or gain from the different changes based on an average lap of 1m 30seconds:

    - **REDUCE DOWNFORCE BY 70%: +10-15 sec.**
    - **WIDER, TALLER AND IMPROVED TIRES: - 3-5 sec.**
    - **INCREASE HORSEPOWER BY 300-400HP: - 3-5 sec.**
    - **REDUCE WEIGHT by 150-200Kilo: - 3-5 sec.**

Again, this is a ball park guess without having done any significant research but based on my own experience and discussions with other drivers, engineers and designer. But it's clear that we will be very close to the current lap times quite quickly, but it will be achieved in a completely different way. Hopefully in a way that will bring back the ***AWESOME FACTOR*** to F1, with a visually fast looking car that the drivers will have to really fight with in order to get the most out of them. The spectators will be able to see the drivers working hard with the cars moving around a lot more.

- **4 WAY MATRIX consisting of CHASSIS / POWER UNIT / TIRES / DRIVER:**
  Based on the ideas I've presented above, when the new rules are being created, there should always be a focus on what I refer to as a 4-way matrix mentioned above. The rules should always strive for each of the four elements to have an equal importance in the performance of the car. This will also help spread the load of development costs between the teams, engine manufacturers, the tire companies and it will help promote the best drivers to graduate to F1.

- **REDUCE THE IMPORTANCE OF ELECTRONICS:** By eliminating all the electronic aids the drivers currently use, except the ones absolutely necessary to operate the car, the emphasis will shift back more towards car control instead of the engineer's optimizing the car's performance by studying the data to see where the drivers need less or more support in certain areas, with the help of a multitude of settings all controlled via the electronics on the cars. One of the Technical Directors was quoted recently saying, "We need to throw some things in there to make the racing more unpredictable". If we instead threw a bunch of things away, we would get to that point a lot faster, and save a lot of money in the process. The electronic driver aids would be a good starting point of

that. This is a perfect example of poor governance, that could and should have been stopped immediately when this trend started and has subsequently gotten completely out of hand.

- **GOVERNANCE: ELIMINATE THE DESIGNERS AND ENGINEERS IN THE RULE MAKING PROCESS AND SIMPLIFY THE RULES:** Since the rule making process became a democracy of sorts, which allowed all the teams to have a say through the introduction of the "Technical Working Group" we have seen a progressive decline in the overall quality of the racing. The rules have become more and more complicated each year to the point where the team principals no longer bother to even try to understand them. They simply leave it to their technical team to make the decisions – the 2019 aero rules are a perfect example of this. We have yet another new rule on the aero, apparently to make overtaking easier. This rule will make absolutely zero difference and will only add tens of millions of expenses to the already stretched budgets for most of the teams. The engineers are all great and highly intelligent people, and it's great working with them and talking to them, but they only have one thing in mind which is to make the cars go as fast as they can. It's very difficult for them to see the bigger picture of what is required to make all the elements of the package work. I think it's actually irresponsible of the team principals and the FIA to allow this to have happened in the first place, bearing in mind that the car rules are by far the most important element to make the business model work. The engineers are there to make a car go as fast as possible within a set of rules handed to them. Now we instead have this bizarre situation where the inmates are running the asylum – what could possibly go wrong! Allow the engineers to do what they are good at and leave the governance to people that know what they're doing. It's evident that the democratic approach is not working. The teams can't agree on anything most of the time, and, as such, we always will end up with some form of a compromise that will in the end make no difference, or at best, very little. Instead, it should be governed by putting together an unbiased and well-rounded group of independent people that understand the business from a competition, technical as well as a practical and economic point of view - people who can see in advance when things are heading in the wrong direction before they do, and then act forcefully before it's too late to course correct. Make a set of rules that are challenging and exciting for manufacturers and private teams alike, and make them fair and equal and, most of all, easy to understand for both teams and the fans.

- **MODIFY THE RACE TRACKS TO MAKE THEM MORE DIFFICULT AND MORE INTERESTING TO WATCH:** Virtually every race track today is either designed or modified to suit the current type of high downforce cars. As such, we end up with tracks that are full of low and medium speed corners, 1st gear hairpins, and boring chicanes. These types of corners are not very interesting either for the drivers or the spectators but are merely there in order to slow the cars down. Chicanes should be banned as far as I'm concerned, and for a track designer to put one in when they have a clean sheet of paper is beyond me. Abu Dhabi is a perfect example, they could have done pretty much anything they wanted with a budget that was through the roof, and we end up with arguably the most boring race track ever made. If the downforce is reduced significantly, many of these

tracks can be modified, or in the case of some of the older tracks, put back to their original design as the cornering speeds will again be much lower. Brake distances will be longer and with run off areas now much bigger than they were when they changed them in the first place, they will be much safer. The fans will love watching the drivers balancing the cars on the limit rather than perfecting the art of jumping a kerb in a low speed chicane which is currently the case and where you gain the most time in a modern car. Although the runoff areas are there for a reason, it's important to find a method to "punish" a driver if he goes over the limit, something that will significantly slow him down to the point where there will be an automatic loss of time that far outweighs the potential gain of trying too hard and going over the limit. As it is today, every driver can find the limit on most tracks within the first 5 laps as there is no real penalty for going too fast and all you have to do is peg it back slightly the following lap. Interestingly, there are no more incidents on the street circuit where there is often no run off areas at all, which goes to show that drivers will be more disciplined when they have to be.

- **REPLACE DRS WITH PUSH TO PASS (P2P):** The introduction of the DRS system was a typical knee jerk reaction based on the fact that there were too many complaints that the racing was getting too boring and there was not enough overtaking. Although it has certainly helped the overtaking, it is of no interest as the driver in front is nothing more than a sitting duck, and there is no skill or strategy involved as you can use it as many times as you like during the course of the race. The Push to Pass system that is being used in IndyCar, for example, is far more interesting in that each driver is given a certain number of seconds per race where they can use the P2P, it is then up to the driver to distribute this to his best ability for the duration of the race. For example, if he's too aggressive in the beginning of the race and he's run out of seconds he'll be in trouble at the end of the race if there is a restart or a dice for position with another driver who still has enough P2P time left in the bank to attack. The time consumed could be displayed on the TV monitors so the fans can see what each driver has consumed. It adds another element of intrigue both on the track and for the commentators to discuss during the broadcast. Depending on what engine concept is used, a percentage performance gain could be used to achieve the same result.

- **RACE FORMAT:** The current race format is working quite well, it has a good balance of speed and endurance for both drivers and cars. By reducing the downforce significantly, the importance of gaining positions in the first couple of laps will become less important and we will see a more balanced approach from the drivers of where and when they decide to attack in the races, rather than risking everything in the start as they know that's pretty much their only chance to overtake the way the current cars work. Allow teams to run the full distance if they wish to gamble on tire strategy, no mandatory pitstops. Race tactics will become more important, with more options on fuel strategy, tire wear and overall speed of the cars as the race progress. With the new rules, drivers should be able to attack at full speed for the duration of the race, with enough energy and tires to race hard from start to finish.

- **LONGER PITSTOPS / 1 PERSON PER WHEEL:** Although it's fascinating to watch the coordinated ballet of 16 people during an F1 pitstop, once you've seen it a couple of times it's all the same as far as I'm concerned. It doesn't bring any further elements that add to the show. In fact, because the pitstop is so fast, it makes the overall race strategy more predictable than if you had a longer stop. If you only have one person on each corner, it will make the time of the stop about 5-7 seconds longer than the current 2-4 second stops. This will alter the strategy calls and we will most likely see some drivers choosing to stay out and others going all out risking the extra time the pitstop will take. Tire strategy will become more important and as such add an extra element of unpredictability.

- **FEWER INVESTIGATIONS AND PENALTIES:** Eliminate the endless investigations and penalties for every little incident that occurs during the races. By using a random group of former drivers as Race Stewards, we are only causing confusion as each one of them have their own views of what is acceptable or not. If these things have to be policed based on a subjective viewpoint, it's critical that the decision is made by the same person or team of people every time, otherwise it's inevitable that there will be inconsistency. We need one person with great experience and is somewhat current, that is respected by everyone, to be appointed Chief Steward and attend all the races. This way, there will be consistency and all the drivers will eventually know what they can and can't get away with. This person needs to be extremely tough and firm at all times. Because as we know, each generation have at least one driver who is pushing the envelope to the absolute limit to what they can get away with. They're always in trouble with the stewards and historically these guys have such a strong conviction that they've never done anything wrong, that they are able to gradually wear the stewards down and often get away with stuff they shouldn't. As it is, we currently get some very odd penalties and decisions depending on who is stewarding each particular race. Again, a lot of this is an unfortunate side effect of trying to sanitize the tracks to a point where there is no longer any punishment for going over the limit.

- **NO PENALTIES FOR ENGINE AND GEARBOX CHANGES:** Can anyone even remember the original purpose why this rule was implemented? I think it was in the interest of cost reduction that it was decided that teams would only be allowed a maximum of 3 engines per season and the gearbox had to run at least 5 consecutive races before it could be replaced. It is clearly evident that this rule has had the exact opposite effect and have made the costs spiral even higher. By implementing a Draconian set of rules that are being enforced in an equally Draconian manner, the manufacturers are being forced to develop and build engines that are infinitely more expensive to produce than it would be by simply allowing a sensible number of engines and gearboxes over the course of the season. Every team and manufacturer are struggling to meet the strict criteria of making both the engines and gearboxes last, and by enforcing the rule as strictly as they do, the competition and subsequently the entertainment side have become a complete farce in many instances. The constant grid penalties are ruining the races and the competition is becoming a joke when a driver starts a race from last on the grid with 50 or more grid penalties. The team's (rational)

behavior of strategically taking penalties in order to position themselves for a better future race leads to even more confusion amongst fans and adds nothing to the racing. As always, the best way to reduce the costs in the long run is by having rules stability, the constant tinkering with the rules are just driving the costs higher every time, and the top teams with big budgets will always gain more from these rules changes as it's the R&D that drive the costs through the roof, not the manufacturing of parts.

ENTERTAINMENT:

- **MAKE THE DRIVERS MORE ACCESIBLE:** The drivers are the stars and they will always be more important to the fans than the cars or the teams. Every series other than F1 have some form of planned fan engagement either the day before the race weekend starts or for an hour at some point during the race weekends. Make it compulsory for each driver to do a certain number of days as part of the super license. It's a pain for the drivers but in the long run it will benefit everybody. Make it mandatory for the promotors, broadcaster and drivers to provide X hours of promotional appearances prior to each race in each country. By forcing / helping each promotor to better promote the races, each driver will be helping themselves by building a better audience and a more valuable ecosystem. Cross promote the drivers in other forms of entertainment in order to gain a larger following and new demographics.

- **MAKE THE RACING LESS PREDICTABLE:** By implementing some of the rule changes I have already mentioned in the chapter on Competition, the racing will become less predictable without the use of any artificial devices such as the DRS. The combination of less aero, more power, less forgiving tracks, less driver aids and longer pitstops will all contribute to more human errors and will not only make the racing a lot more interesting to watch but it will also sort out the good from the average. By definition, the more well engineered a car is, the less chance of something unpredictable to happen as it makes the life of the driver much easier. By eliminating some of the electronic aids and making the cars have significantly less downforce, this will automatically help making the races less predictable. By enforcing the track limits there will be more occasions for drivers to make a small mistake which is often all a following driver needs in order to make a move that would otherwise be impossible. The reduction in downforce will help the car following to stay much closer to the car in front, and as such he will be able to get a run on the car in front on the exit of a corner without having to rely on DRS to pass on the following straight. It's no coincidence that some of the best races we've had in recent years have come when there have been changing conditions, usually unexpected weather, thus making it difficult for the engineers to model the race strategy to the n^{th} degree in their race simulations. We won't be stuck with "he's now in the DRS zone" or "will he do an undercut or an overcut" which it is pretty much what it's reduced to at the moment.

- **BRING BACK THE "AWESOME" FACTOR:** F1 should be defined by one word, AWESOME! With

these proposed rule changes, we will arrive at a point where we will again have some beautiful and spectacular looking cars that will also sound great. Make bravery one of the tools that count in a driver's arsenal and allow the drivers who are willing to stick their neck out to gain a couple of extra tenths in a high-speed corner do so, and let the fans enjoy that show! The massive reduction in downforce will visibly show the car control of the drivers as opposed to the current cars which are on "rails" all the time. We will have talking points like "top speed around 400kph" and "1,300-1,400HP" Power Units, which to anyone is AWESOME and it will get people's attention. It's difficult to explain that F1 is the ultimate in motorsport when we have a number or regular road car today with similar power and top speeds. How do you explain why F1 is the ultimate when you can buy a Jeep Truck with 800HP for less than $100,000? "Well, the F1 cars have a huge amount of downforce which means they are really fast in the slow and medium speed corners…and because they are so fast in these corners, they have had to reduce the power in order to slow them down. And because the cars have so much downforce it's made it very difficult to follow another car which makes overtaking really difficult, so to fix that we came up with this idea called DRS. This is a really clever device that that the engineers who design these cars came up with, that the driver following another car can use when he wants to overtake the car in front. There is nothing the driver in front can do at that point to defend himself, but it's supposed to spice up the show." Not a great or easy explanation for someone who is trying to understand the sport. Anytime you have to explain why something is great you're already in trouble, this is why we need to simplify everything so that anyone can immediately see and understand that this is really AWESOME!

How simple would it instead be to use the formula of "Less Aero/Lower Cornering speeds/More Horsepower/More Acceleration/Higher Top-speeds/Longer Braking distance/ More Passing/More Visible Car Control"? No one understands or can appreciate downforce, you can tell them the cars produce 5,000KG of downforce or 50KG, most people wouldn't know the difference between that and a bar of soap. But everyone understands 1,400HP and 400KPH top speeds, everyone is immediately impressed by that!

- **IMPROVE THE BROADCAST AND THE GRAPHICS:** I find it very difficult to follow any race and fully understand the dynamics of what is happening especially once the pitstops have started. The graphics and the information you get is very limited and quite poorly presented. It has gotten better this last year (at least in the U.S. now that we see the Sky broadcast) but there is still a massive amount more that could be done to keep the viewers better informed of what is going on. I don't think you can have too much info or data displayed, anything that will keep the viewer better informed is a plus. The teams already look at a lot of interesting data so a lot of the information is there and just needing to be presented to the audience so they can better understand what's transpiring. With the emerging Drone technology, it would be possible to show a completely different view of the cars and how a battle between different cars transpire that will add a whole new element. I've seen some prototype footage of this already done at some minor events, and it's a completely different experience than with fixed cameras. This is one area that I believe could

really be a game changer for the viewing experience.

- **CREATE A HUGE PRIZEMONEY FUND FOR EACH RACE THAT IS TRANSPARENT AND OFFICIAL:** As I have already outlined earlier in this article, allocate a large portion (30-40%) of the total pool of funds from FOM as prizemoney rather than a guaranteed amount before each season starts. This a common management tool to align incentives with performance. Money talks and people are always curious when there's big money involved in anything. If Mayweather would be fighting for a few thousand dollars each match no one but the absolute die-hard boxing fans would bother tuning in, but because it's tens of millions at stake everyone is curious of the outcome, even people that don't like boxing. This is human nature. As it is, not many even know what the prize money is in F1, only the diehard fans have some idea what each team get before the season even starts, based on an incredibly complicated payout schedule. If we use the already mentioned formula of $200.000/Point, the prizemoney for each race would be:

1.	**25 points x $200.000**	**$5.000.000**
2.	**18**	**$3.600.000**
3.	**15**	**$3.000.000**
4.	**12**	**$2.400.000**
5.	**10**	**$2.000.000**
6.	**8**	**$1.600.000**
7.	**6**	**$1.200.000**
8.	**4**	**$ 800.000**
9.	**2**	**$ 400.000**
10.	**1**	**$ 200.000**

RELEVANCE:

- **HOW IMPORTANT IN THE BIGGER PICTURE IS IT THAT FORMULA ONE OR MOTORSPORT IN GENERAL IS RELEVANT?** Does anyone know what F1 stands for today? This may be the most important question of all in order for F1 or motorsports in general to survive. In order to be relevant, it is obviously important to understand in what context you want to be relevant. In the case of Formula One, does this mean you must be socially relevant or more relevant towards the fans, or can both be achieved in a realistic way. If you focus on being socially relevant, it is critical to understand if you are following an objective and realistic path or just a narrative. Is it more important that we have an engine formula that is seen to embrace the environment than it is to have fast, loud and spectacular cars? Is it more important that we have engines that can last 1/3rd of a season than it is to have a hugely powerful engine that may break every now and then, but will either reward or punish the driver and team instantly if they win or the engine breaks? Is it more important that we have race tracks that are so sanitized and safe that it's become almost impossible to have a bad accident than it is to have tracks that will punish a driver if he goes over the limit?

- Political correctness has now crept in to every aspect of life. In some cases, it seems that companies are more interested in doing what is perceived to be the politically correct thing, than it is to make a profit or even do what makes good common sense. Everyone is paranoid about not upsetting anyone. Is motorsport about being correct in every way, does it have to satisfy all the various agendas that are currently being promoted through every possible platform by anyone who cares to voice their opinion. Is it even possible to keep everyone happy anymore? I think it's time to do some serious soul searching in order to work out what it is that really matters both for the competitors and the fans.

- **FORMULA 1 COULD BECOME THE GLOBAL LEADER IN INNOVATIVE THINKING AND IMPLEMENTATION OF NEW TECHNOLOGIES:** By creating a formula that will be based around a maximum amount of energy, wherever the source is coming from, it could be gasoline, electric, hydrogen fuel cells, kinetic, or anything else that may not even be invented yet. I believe this is the one area Formula One could really make a difference and lead the automotive world towards a truthful and honest direction in power unit technology. Instead of following one politically motivated directive it would be better to do the complete opposite and create your own directive, that will by default eventually become the correct and obvious path forward. It will very soon become apparent which is the most efficient alternative based on the principles of thermal efficiency, energy consumption, weight and power output. For the first time in a very long time, F1 could justify the spend of the manufacturers by inventing and creating things we may not even know exist at this point. Unleash all the bright minds that are already working in F1 and let them get creative! Instead of pouring away money on silly aerodynamic tweaks, it could be spent on something that would truly make a difference. Imagine if someone realized some of Nikola Tesla's ideas for example, or a number of other incredibly brilliant concepts that are already out there. Sport is the perfect arena for this as we are talking about competition before a concept is proven. Once it is proven and everyone can see how brilliant it is, it's hard to put the genie back in the bottle and the world will have to follow whether it's following the politically correct agenda or not. Whomever comes up with any of these new concepts will be known worldwide for doing something that really made a difference in human history and Formula One will again find its rightful place in the automotive world.
- **ELIMINATE THE IMPORTANCE OF AERODYNAMICS:** I'm repeating myself here, but it's important to understand that aerodynamics is the only item that falls under all four categories that are the key areas of Formula One. The fact that aerodynamics is affecting all four categories in a negative way should be a wakeup call more than anything. Aerodynamics have the least relevance of anything on a racecar, except making the car go fast. Yet it's the highest spend by a massive margin for every team. It's the largest contributor to the lack of racing and the entertainment is suffering because of this, yet we just keep on piling on more and more of the same, year after year! Eliminate the importance of aerodynamics and shift the focus to other areas to gain back the speed. I have already addressed the details on how to achieve this earlier in the article.

SUMMARY: It's become quite evident that in order to get things back on the right track it will not be enough to continue with small band-aid fixes here and there, in fact, it will only make it worse as history has shown over and over. What I am proposing is based on what I believe is a realistic and objective analysis rather than following a narrative based on a number of external factors and political motives – motives that will never add anything to help maintain the popularity or grow the sport into the future. In order for the sport to survive, it is imperative that we all understand that it's unsustainable in the long run to deviate from the core elements of what made Formula One such a huge sport to begin with.

There are a number of initiatives being proposed – adding to the show, bringing the costs down, make the racing less predictable, branding, digital media etc. None of this will make any difference unless we get to the core of the problem, which is the cars and how they are designed. If I may use the analogy of a restaurant, you can do all the slick and fancy stuff, new signs on the front, social media campaigns, celebrities, new menu's, etc. but if the food sucks no one will come back or show up in the first place.

If we don't fix the cars and make them exciting and interesting to watch again it won't matter what else, we do. Once we fix the cars everything else will fall into place automatically. The tracks will become interesting and challenging again, the racing will be close and exciting to watch, the human component will become at least as important as the technical, and the drama will unfold accordingly.

Formula One have always been about brave young men driving these crazy fast cars on the limit, and if we lose that stigma, there is nothing that makes it unique in any way. It will be just as interesting to watch a bunch of gamers racing online. From a drivers perspective there is nothing that comes close to the experience when you're on the limit and you decide to step into that unknown territory by taking a highspeed corner flat for the first time in order to gain that extra tenth or two, not knowing for sure what the outcome will be, when you're literally staring at your own soul for that brief moment. Those are the things that every driver worth his salt is craving. They define who you are as a person and go much further than just that brief split second. Everyone who is present can see and appreciate it, and this is what makes, or at least used to make, our sport so incredibly different and special compared to most other sports.

Formula One should and could write its own rules. It's a big enough sport to set the directive for anyone that wants to compete in it or follow the sport. If not, as we can clearly see at the moment, we will end up with a very confusing and complicated product that's neither here or there, and no one can fully understand it. We want to see brave drivers on the race track, but we also need brave leaders in the boardroom to make this happen.

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