

Hacking & Painting: Big Ideas from Paul Graham

Part One: PG on Work

Paul Graham is my [hero](#) when it comes to writing on the internet.

I first came across his work via Twitter ([@paulg](#)) a few years ago and I've never looked back. His writing has given me better tools to describe the world around me. It has also inspired me to publish some of my own essays. We are very lucky to live in an age where people can share ideas online and to be around to enjoy Paul's writing.

In this series I will share my favourite ideas from Paul:

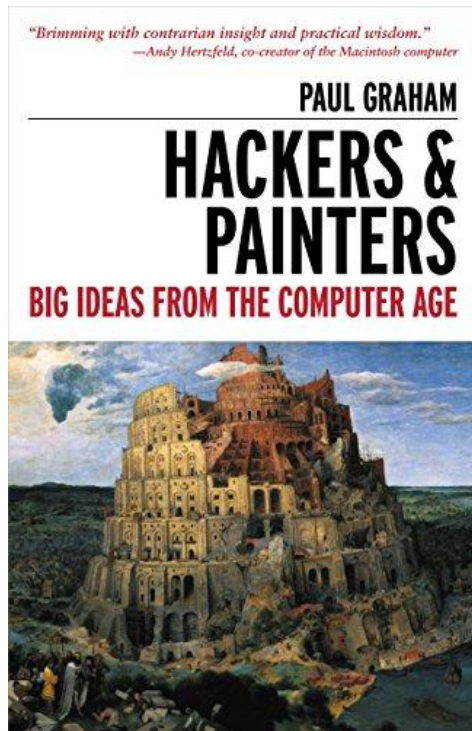
1. On Work,
2. On Life, and
3. On Creating

In this part, I'll dive into his ideas on work. Particularly on finding flow (makers and managers have different schedules), working hard (startups and corporates allow for different outcomes) and the importance of thinking for yourself (some careers demand more independent-minded thinking than others).

Intro

For those of you who haven't come across his work yet, here is the highlights package. Paul is a computer scientist (or hacker, as he explains [here](#)) and entrepreneur. He co-founded Viaweb, the first web app that allowed users to build an online store through their browser back in 1996. Following this experience, Paul founded Y Combinator (YC), a company that helps people start startups. YC invested early in companies like AirBnB, Stripe, Dropbox and Reddit among others. Paul is also the foremost expert on the Lisp programming language. He wrote two books on the subject, *On Lisp* and *ANSI Common Lisp*, and continues to create new dialects in the language. See his work on Bel [here](#).

Mainly, Paul writes great [essays](#). His body of work is my idea of perfection. Paul has published over 200 (208 by my count as of writing this piece) essays in his life, excluding subject matter specific pieces on Lisp. The essays are diverse, covering topics as wide-ranging as the [benefits of reading](#), the perspective that comes with [having kids](#), why [nerds](#) don't conform and how to build a better [spam](#) email filter. His book, the wildly popular *Hackers & Painters, Big Ideas from the Computer Age* (2004) includes 15 of his best essays covering startups, hacking and programming languages.



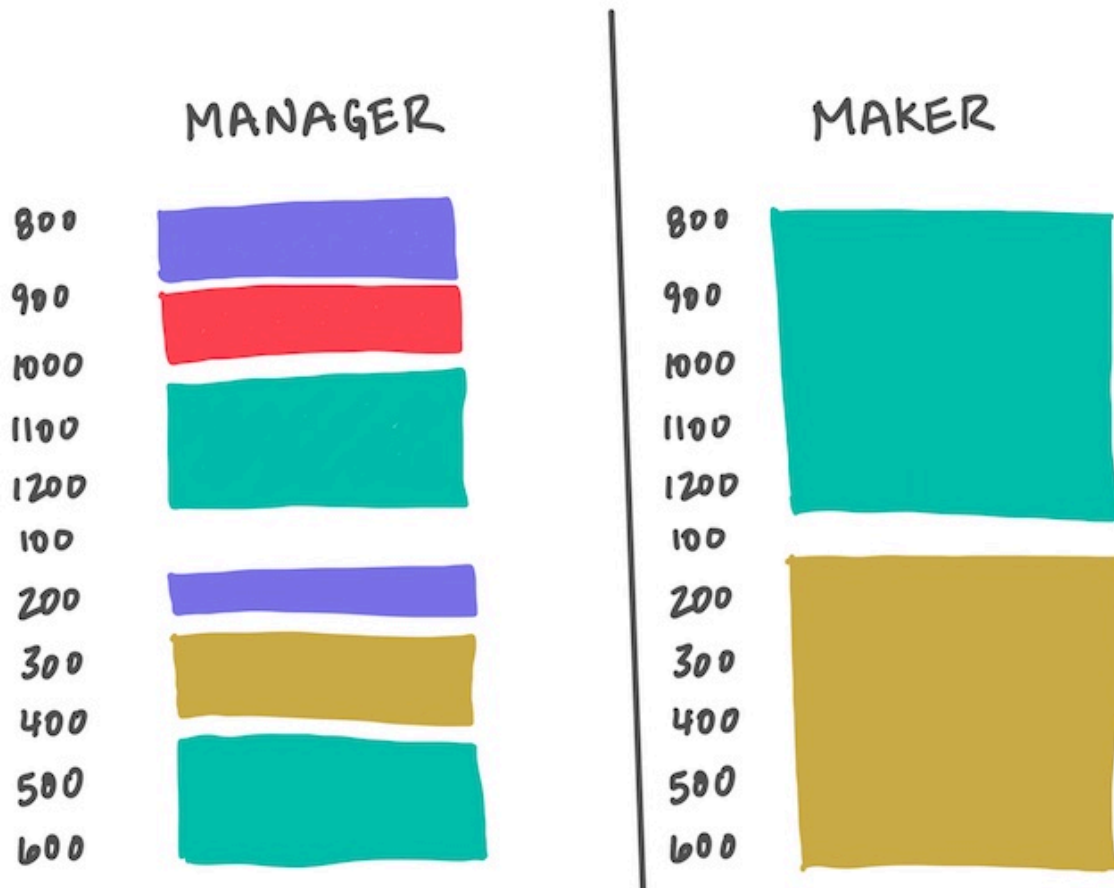
With that intro we are all set for part one: PG on Work.

1. On Finding Flow

We've all been there. The work days that are filled with meetings upon meetings and meetings about meetings. The days you look back on and wonder if you actually created something of value. You know how much these days hurt because you have experienced the opposite, the days of high output and productivity, when everything works perfectly. You have a big task or project to tackle with zero distractions, it's only you and the work and amazing things can happen.

For a long time the constant distraction of meetings and the **lack of control** over my work hours bothered me, but I always accepted it as part of the job. Until I read Paul's [Maker's Schedule](#). [Manager's Schedule](#). This was the first time someone so eloquently described the problem and offered a solution, which reframed how I would approach work.

The premise is simple. There are two types of schedules. The Maker's schedule and the Manager's schedule. **Makers** are the creators, the builders, the developers, the coders, the writers, the people doing the work. **Managers** are the bosses, the coordinators, the leaders, the people checking if the work is being done. Makers operate in units of half a day. Managers operate in units of half an hour. Makers need deep focused uninterrupted time to work on a single task to write good code or a good essay. Managers employ the traditional appointment calendar with different time slots, switching between tasks every hour.



Via: <https://tylerdevries.com/maker-manager/>

There are Makers and Managers in every company and there is a Maker and a Manager in everyone. Maker mode is very important for creative, deep work. Manager mode is important for making sure you reach your targets. Just as you need both Makers and Managers to manage an organisation, you need both schedules to manage yourself.

“To direct and capture the value that focus creates, we need coordination“, as Cam Hoshemi, a fellow Write of Passage cohort member, describes in his [article](#) on **Focus vs. Coordination**. Effective companies and employees realize the importance of both schedules and the balance that needs to be struck between focus (making) and coordination (managing). Some jobs require more focus, while others require more coordination. The interplay between them is vital.

It gets tricky when the two schedules clash and usually it's the **Makers that suffer**. It takes time to get into flow and constant context switching is a costly distraction. Paul describes how this can kill morale:

For someone on the maker's schedule, having a meeting is like throwing an exception. It doesn't merely cause you to switch from one task to another; it changes the mode in which you work [...]

ambitious projects are by definition close to the limits of your capacity. A small decrease in morale is enough to kill them off.

This is why it's important for Makers to **protect** their schedules. Since there is an opportunity cost to being distracted, I try to move meetings around so that I can get them all out in one chunk (in the morning if possible). This clears my afternoons for 'actual work' (as I see it) on new product ideas, strategy and building models.

Paul reflects on how he used both schedules during his time at Viaweb:

When we were working on our own startup, back in the 90s, I evolved another trick for partitioning the day. I used to program from dinner till about 3 am every day, because at night no one could interrupt me. Then I'd sleep till about 11 am, and come in and work until dinner on what I called "business stuff." I never thought of it in these terms, but in effect I had two workdays each day, one on the manager's schedule and one on the maker's.

Paul's case is extreme, but the principle is important. Knowing when you are in each mode can help you to stay focused and switch contexts less. You can partition your day to protect your creative, focused time, while not neglecting the necessary coordination that comes with being a team player.

2. On Working Hard

I work for a small team in a big European corporate. The mother company does well due to its large market share. Steadily turning over profits and keeping shareholders happy. Having over 10,000 employees has its challenges though. The only way to manage so many people is through **rules** and bureaucracy. This comes at a cost. Even though our team is small, the red tape from the top means things move slowly. I don't have anything against corporates. Great things can be achieved at scale, but I often get the feeling that a smaller, independent team can get more done faster.

Enter Paul Graham. He uses a simple back-of-the envelope [calculation](#) to show how you can be **36 times** more productive at a startup than in a corporate job.

You could probably work twice as many hours as a corporate employee, and if you focus you can probably get three times as much done in an hour. You should get another multiple of two, at least, by eliminating the drag of the pointy-haired middle manager who would be your boss in a big company. Then there is one more multiple: how much smarter are you than your job description expects you to be? Suppose another multiple of three. Combine all these multipliers, and I'm claiming you could be 36 times more productive than you're expected to be in a random corporate job.

Funny and spot on. Obviously it won't be exactly 36, but he reckons you will be at least 10 times and up to 100 times more **productive** at a startup. Startups win because there is no HR chasing

you to complete the latest cyber security awareness campaign this month. There are no pointy haired middle managers holding you back. You can move fast and work on hard problems and choose your own schedule.

Startups win for another reason. Since they are smaller it is easier to **measure** individual performance. At a corporate, you can't go to your manager and demand a higher salary for working harder or getting more done or being smarter. The "official fiction" of your job is that you are already working as hard as you can. Even if they wanted to pay you more, it would still be difficult to measure your value. Apart from the CEO or salespeople, it is difficult to isolate individual performance in a company. In a large group, your work is entangled with the rest of your team. Each cog depends on the other cogs in the machine. Paul compares a galley of a thousand rowers to a ten-man boat with the best rowers:

A big company is like a giant galley driven by a thousand rowers. Two things keep the speed of the galley down. One is that individual rowers don't see any result from working harder. The other is that, in a group of a thousand people, the average rower is likely to be pretty average. [...] But the real advantage of the ten-man boat shows when you take the ten best rowers out of the big galley and put them in a boat together. They will have all the extra motivation that comes from being in a small group. But more importantly, by selecting that small a group you can get the best rowers. Each one will be in the top 1%. It's a much better deal for them to average their work together with a small group of their peers than to average it with everyone.



Regardless of where you work, the principles are useful. Even if you work at a corporate, Paul's "36x" mindset can help you stand out from the rest. You can control how many hours you put in, your output per hour and hopefully you are a bit smarter than your role requires. Also if you are in the galley like me, try to surround yourself with the best rowers and point out where you are adding value.

3. On Thinking For Yourself

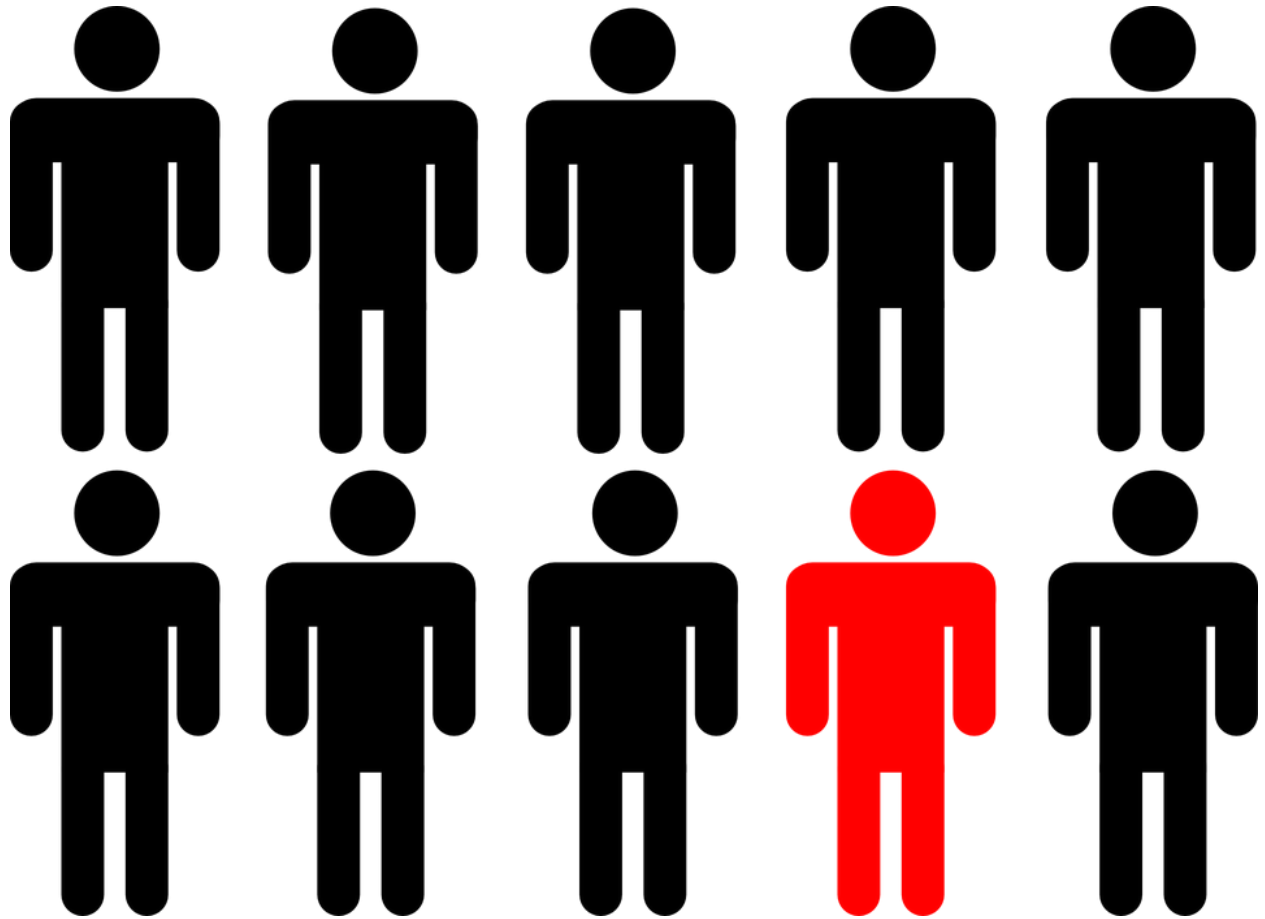
All work requires you to be **correct**, but only a few jobs require you to be **correct and novel**. These jobs are usually more fun, but also more challenging.

An administrator only needs the first component, while an essayist needs to add **new** insights or find novel ways of describing concepts for his work not to be boring.

In order to publish a paper, a scientist can't reiterate what someone else has discovered before. She needs to publish a paper that is not only factual, but also shows something other scientists haven't realized yet. An investor needs to correctly predict the direction a stock's price will move and also pick stocks other investors don't share her views on. If she only agrees with the market, her portfolio will be no different to an index-tracker. Startup founders also need to think for themselves. They need to create something that other people think can't work or find a solution for a problem people can't solve.

Paul argues that knowing where you fall on the **conventional- to independent-minded** spectrum is super important for choosing the best type of work for you. If you pick the wrong role, you are going to be unhappy. Do you prefer being right the whole time or dealing with the headwinds of uncertainty? As he says:

"Do you want to do the kind of work where you can only win by thinking differently than everyone else?"



If your role requires creativity, there are a number of strategies to nurture your independent-minded qualities:

1. Surround yourself with other independent thinkers (decentralised friends),
2. Retain a degree of skepticism, and
3. Be fastidious about the truth.

Firstly, surround yourself with other independent-minded people, especially those who don't share all your views. Online creator George Mack ([@george__mack](#)), describes this in his [mini-essay](#) on **centralised vs. decentralised friend groups**:

1. **Centralised friend groups** - You have one large cluster of friends. They all have a lot in common and share the same history, beliefs and behaviours. They usually fit in one box: "School friends" or "Work friends".

2. **Decentralised friend groups** - You have many small clusters of different friends who aren't connected. The only thing they have in common is that they know you. Ambitious friends, fun friends, serious friends, relaxed friends, fitness friends, hometown friends, travelling friends etc

“If you want to follow the crowd, opt in for centralized friend groups. If you want to think for yourself, opt in for decentralized friend groups.”

I have always considered myself lucky to have a large decentralized friend group. People who challenge my views, bend the rules a bit and add spice to life. The added bonus is this mindset helps to add new perspectives in my writing and my work.

Secondly, it helps to adopt an attitude of **skepticism**. Question things. If you agree with everyone on everything that should be a warning sign. We are susceptible to accepting beliefs now that will later turn out to be wrong. Treat it like a puzzle, see if you can guess which beforehand. If you were living in Salem, Massachusetts in the late 1600s you might have imagined witches to be lurking around every corner. In 2021, these beliefs are a distant memory and limited to the characters in *The Crucible*.

Lastly, it is important to be **fastidious about the truth**. Truly independent-minded people do not only believe in things that are not false, they are also careful about their degree of belief. Your degree of belief can help you to think independently and also protect you from falling for conspiracies.

By nurturing your independent-mindedness in this way, you can do novel, creative work. As Paul says:

“To do good work you need a brain that can go anywhere. And you especially need a brain that's in the habit of going where it's not supposed to. Great work tends to grow out of ideas that others have overlooked, and no idea is so overlooked as one that's unthinkable.”

There you have it. PG on finding flow, working hard and thinking for yourself. The next piece will delve into his views on life and finding meaning. Stay tuned!

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