How to Do What You Love

Paul Graham

To do something well you have to like it. That idea is not exactly novel. We've got it down to four words: "Do what you love." But it's not enough just to tell people that. Doing what you love is complicated.

The very idea is foreign to what most of us learn as kids. When I was a kid, it seemed as if work and fun were opposites by definition. Life had two states: some of the time adults were making you do things, and that was called work; the rest of the time you could do what you wanted, and that was called playing. Occasionally the things adults made you do were fun, just as, occasionally, playing wasn't—for example, if you fell and hurt yourself. But except for these few anomalous cases, work was pretty much defined as not-fun. And it did not seem to be an accident. School, it was implied, was tedious *because* it was preparation for grown-up work.

The world then was divided into two groups, grownups and kids. Grownups, like some kind of cursed race, had to work. Kids didn't, but they did have to go to school, which was a dilute version of work meant to prepare us for the real thing. Much as we disliked school, the grownups all agreed that grownup work was worse, and that we had it easy.

Teachers in particular all seemed to believe implicitly that work was not fun. Which is not surprising: work wasn't fun for most of them. Why did we have to memorize state capitals instead of playing dodgeball? For the same reason they had to watch over a bunch of kids instead of lying on a beach. You couldn't just do what you wanted.

I'm not saying we should let little kids do whatever they want. They may have to be made to work on certain things. But if we make kids work on dull stuff, it might be wise to tell them that tediousness is not the defining quality of work, and indeed that the reason they have to work on dull stuff now is so they can work on more interesting stuff later. [1]

Once, when I was about 9 or 10, my father told me I could be whatever I wanted when I grew up, so long as I enjoyed it. I remember that precisely because it seemed so anomalous. It was like being told to use dry water. Whatever I thought he meant, I didn't think he meant work could *literally* be fun—fun like playing. It took me years to grasp that.

Jobs

By high school, the prospect of an actual job was on the horizon. Adults would sometimes come to speak to us about their work, or we would go to see them at work. It was always understood that they enjoyed what they did. In retrospect I think one may have: the private jet pilot. But I don't think the bank manager really did.

The main reason they all acted as if they enjoyed their work was presumably the upper-middle class convention that you're supposed to. It would not merely be bad for your career to say that you despised your job, but a social faux-pas.

Why is it conventional to pretend to like what you do? The first sentence of this essay explains that. If you have to like something to do it well, then the most successful people will all like what they do. That's where the upper-middle class tradition comes from. Just as houses all over America are full of chairs that are, without the owners even knowing it, nth-degree imitations of chairs designed 250 years ago for French kings, conventional attitudes about work are, without the owners even knowing it, nth-degree imitations of the attitudes of people who've done great things.

What a recipe for alienation. By the time they reach an age to think about what they'd like to do, most kids have been thoroughly misled about the idea of loving one's work. School has trained them to regard work as an unpleasant duty. Having a job is said to be even more onerous than schoolwork. And yet all the adults claim to like what they do. You can't blame kids for thinking "I am not like these people; I am not suited to this world."

Actually they've been told three lies: the stuff they've been taught to regard as work in school is not real work; grownup work is not (necessarily) worse than schoolwork; and many of the adults around them are lying when they say they like what they do.

The most dangerous liars can be the kids' own parents. If you take a boring job to give your family a high standard of living, as so many people do, you risk infecting your kids with the idea that work is boring. [2] Maybe it would be better for kids in this one case if parents were not so unselfish. A parent who set an example of loving their work might help their kids more than an expensive house. [3]

It was not till I was in college that the idea of work finally broke free from the idea of making a living. Then the important question became not how to make money, but what to work on. Ideally these coincided, but some spectacular boundary cases (like Einstein in the patent office) proved they weren't identical.

The definition of work was now to make some original contribution to the world, and in the process not to starve. But after the habit of so many years my idea of work still included a large component of pain. Work still seemed to require discipline, because only hard problems yielded grand results, and hard problems couldn't literally be fun. Surely one had to force oneself to work on them. If you think something's supposed to hurt, you're less likely to notice if you're doing it wrong. That about sums up my experience of graduate school.

Bounds

How much are you supposed to like what you do? Unless you know that, you don't know when to stop searching. And if, like most people, you underestimate it, you'll tend to stop searching too early. You'll end up doing something chosen for you by your parents, or the desire to make money, or prestige—or sheer inertia.

Here's an upper bound: Do what you love doesn't mean, do what you would like to do most *this second*. Even Einstein probably had moments when he wanted to have a cup of coffee, but told himself he ought to finish what he was working on first.

It used to perplex me when I read about people who liked what they did so much that there was nothing they'd rather do. There didn't seem to be any sort of work I liked *that* much. If I had a choice of (a) spending the next hour working on something or (b) be teleported to Rome and spend the next hour wandering about, was there any sort of work I'd prefer? Honestly, no.

But the fact is, almost anyone would rather, at any given moment, float about in the Carribbean, or have sex, or eat some delicious food, than work on hard problems. The rule about doing what you love assumes a certain length of time. It doesn't mean, do what will make you happiest this second, but what will make you happiest over some longer period, like a week or a month.

Unproductive pleasures pall eventually. After a while you get tired of lying on the beach. If you want to stay happy, you have to do something.

As a lower bound, you have to like your work more than any unproductive pleasure. You have to like what you do enough that the concept of "spare time" seems mistaken. Which is not to say you have to spend all your time working. You can only work so much before you get tired and start to screw up. Then you want to do something else—even something mindless. But you don't regard this time as the prize and the time you spend working as the pain you endure to earn it.

I put the lower bound there for practical reasons. If your work is not your favorite thing to do, you'll have terrible problems with procrastination. You'll have to force yourself to work, and when you resort to that the results are distinctly inferior.

To be happy I think you have to be doing something you not only enjoy, but admire. You have to be able to say, at the end, wow, that's pretty cool. This doesn't mean you have to make something. If you learn how to hang glide, or to speak a foreign language fluently, that will be enough to make you say, for a while at least, wow, that's pretty cool. What there has to be is a test.

So one thing that falls just short of the standard, I think, is reading books. Except for some books in math and the hard sciences, there's no test of how well you've read a book, and that's why merely reading books doesn't quite feel like work. You have to do something with what you've read to feel productive.

I think the best test is one Gino Lee taught me: to try to do things that would make your friends say wow. But it probably wouldn't start to work properly till about age 22, because most people haven't had a big enough sample to pick friends from before then.

Sirens

What you should not do, I think, is worry about the opinion of anyone beyond your friends. You shouldn't worry about prestige. Prestige is the opinion of the rest of the world. When you can ask the opinions of people whose judgement you respect, what does it add to consider the opinions of people you don't even know? [4]

This is easy advice to give. It's hard to follow, especially when you're young. [5] Prestige is like a powerful magnet that warps even your beliefs about what you enjoy. It causes you to work not on what you like, but what you'd like to like.

That's what leads people to try to write novels, for example. They like reading novels. They notice that people who write them win Nobel prizes. What could be more wonderful, they think, than to be a novelist? But liking the idea of being a novelist is not enough; you have to like the actual work of novel-writing if you're going to be good at it; you have to like making up elaborate lies.

Prestige is just fossilized inspiration. If you do anything well enough, you'll *make* it prestigious. Plenty of things we now consider prestigious were anything but at first. Jazz comes to mind—though almost any established art form would do. So just do what you like, and let prestige take care of itself.

Prestige is especially dangerous to the ambitious. If you want to make ambitious people waste their time on errands, the way to do it is to bait the hook with prestige. That's the recipe for getting people to give talks, write forewords, serve on committees, be department heads, and so on. It might be a good rule simply to avoid any prestigious task. If it didn't suck, they wouldn't have had to make it prestigious.

Similarly, if you admire two kinds of work equally, but one is more prestigious, you should probably choose the other. Your opinions about what's admirable are always going to be slightly influenced by prestige, so if the two seem equal to you, you probably have more genuine admiration for the less prestigious one.

The other big force leading people astray is money. Money by itself is not that dangerous. When something pays well but is regarded with contempt, like telemarketing, or prostitution, or personal injury litigation, ambitious people aren't tempted by it. That kind of work ends up being done by people who are "just trying to make a living." (Tip: avoid any field whose practitioners say this.) The danger is when money is combined with prestige, as in, say, corporate law, or medicine. A comparatively safe and prosperous career with some automatic baseline prestige is dangerously tempting to someone young, who hasn't thought much about what they really like.

The test of whether people love what they do is whether they'd do it even if they weren't paid for it—even if they had to work at another job to make a living. How many corporate lawyers would do their current work if they had to do it for free, in their spare time, and take day jobs as waiters to support themselves?

This test is especially helpful in deciding between different kinds of academic work, because fields vary greatly in this respect. Most good mathematicians would work on math even if there were no jobs as math professors, whereas in the departments at the other end of the spectrum, the availability of teaching jobs is the driver: people would rather be English professors than work in ad agencies, and publishing papers is the way you compete for such jobs. Math would happen without math departments, but it is the existence of English majors, and therefore jobs teaching them, that calls into being all those thousands of dreary papers about gender and identity in the novels of Conrad. No one does that kind of thing for fun.

The advice of parents will tend to err on the side of money. It seems safe to say there are more undergrads who want to be novelists and whose parents want them to be doctors than who want to be doctors and whose parents want them to be novelists. The kids think their parents are "materialistic." Not necessarily. All parents tend to be more conservative for their kids than they would for themselves, simply because, as parents, they share risks more than rewards. If your eight year old son decides to climb a tall tree, or your teenage daughter decides to date the local bad boy, you won't get a share in the excitement, but if your son falls, or your daughter gets pregnant, you'll have to deal with the consequences.

Discipline

With such powerful forces leading us astray, it's not surprising we find it so hard to discover what we like to work on. Most people are doomed in childhood by accepting the axiom that work = pain. Those who escape this are nearly all lured onto the rocks by prestige or money. How many even discover something they love to work on? A few hundred thousand, perhaps, out of billions.

It's hard to find work you love; it must be, if so few do. So don't underestimate this task. And don't feel bad if you haven't succeeded yet. In fact, if you admit to yourself that you're discontented, you're a step ahead of most people, who are still in denial. If you're surrounded by colleagues who claim to enjoy work that you find contemptible, odds are they're lying to themselves. Not necessarily, but probably.

Although doing great work takes less discipline than people think—because the way to do great work is to find something you like so much that you don't have to force yourself to do it—*finding*work you love does usually require discipline. Some people are lucky enough to know what they want to do when they're 12, and just glide along as if they were on railroad tracks. But this seems the exception. More often people who do great things have careers with the trajectory of a ping-pong ball. They go to school to study A, drop out and get a job doing B, and then become famous for C after taking it up on the side.

Sometimes jumping from one sort of work to another is a sign of energy, and sometimes it's a sign of laziness. Are you dropping out, or boldly carving a new path? You often can't tell yourself. Plenty of people who will later do great things seem to be disappointments early on, when they're trying to find their niche.

Is there some test you can use to keep yourself honest? One is to try to do a good job at whatever you're doing, even if you don't like it. Then at least you'll know you're not using dissatisfaction as an excuse for being lazy. Perhaps more importantly, you'll get into the habit of doing things well.

Another test you can use is: always produce. For example, if you have a day job you don't take seriously because you plan to be a novelist, are you producing? Are you writing pages of fiction, however bad? As long as you're producing, you'll know you're not merely using the hazy vision of the grand novel you plan to write one day as an opiate. The view of it will be obstructed by the all too palpably flawed one you're actually writing.

"Always produce" is also a heuristic for finding the work you love. If you subject yourself to that constraint, it will automatically push you away from things you think you're supposed to work on, toward things you actually like. "Always produce" will discover your life's work the way water, with the aid of gravity, finds the hole in your roof.

Of course, figuring out what you like to work on doesn't mean you get to work on it. That's a separate question. And if you're ambitious you have to keep them separate: you have to make a conscious effort to keep your ideas about what you want from being contaminated by what seems possible. [6]

It's painful to keep them apart, because it's painful to observe the gap between them. So most people pre-emptively lower their expectations. For example, if you asked random people on the street if they'd like to be able to draw like Leonardo, you'd find most would

say something like "Oh, I can't draw." This is more a statement of intention than fact; it means, I'm not going to try. Because the fact is, if you took a random person off the street and somehow got them to work as hard as they possibly could at drawing for the next twenty years, they'd get surprisingly far. But it would require a great moral effort; it would mean staring failure in the eye every day for years. And so to protect themselves people say "I can't."

Another related line you often hear is that not everyone can do work they love—that someone has to do the unpleasant jobs. Really? How do you make them? In the US the only mechanism for forcing people to do unpleasant jobs is the draft, and that hasn't been invoked for over 30 years. All we can do is encourage people to do unpleasant work, with money and prestige.

If there's something people still won't do, it seems as if society just has to make do without. That's what happened with domestic servants. For millennia that was the canonical example of a job "someone had to do." And yet in the mid twentieth century servants practically disappeared in rich countries, and the rich have just had to do without.

So while there may be some things someone has to do, there's a good chance anyone saying that about any particular job is mistaken. Most unpleasant jobs would either get automated or go undone if no one were willing to do them.

Two Routes

There's another sense of "not everyone can do work they love" that's all too true, however. One has to make a living, and it's hard to get paid for doing work you love. There are two routes to that destination:

> The organic route: as you become more eminent, gradually to increase the parts of your job that you like at the expense of those you don't.
>
> The two-job route: to work at things you don't like to get money to work on things you do.

The organic route is more common. It happens naturally to anyone who does good work. A young architect has to take whatever work he can get, but if he does well he'll gradually be in a position to pick and choose among projects. The disadvantage of this route is that it's slow and uncertain. Even tenure is not real freedom.

The two-job route has several variants depending on how long you work for money at a time. At one extreme is the "day job," where you work regular hours at one job to make money, and work on what you love in your spare time. At the other extreme you work at something till you make enough not to have to work for money again.

The two-job route is less common than the organic route, because it requires a deliberate choice. It's also more dangerous. Life tends to get more expensive as you get older, so it's easy to get sucked into working longer than you expected at the money job. Worse still, anything you work on changes you. If you work too long on tedious stuff, it will rot your brain. And the best paying jobs are most dangerous, because they require your full attention.

The advantage of the two-job route is that it lets you jump over obstacles. The landscape of possible jobs isn't flat; there are walls of varying heights between different kinds of work. [Z] The trick of maximizing the parts of your job that you like can get you from architecture to product design, but not, probably, to music. If you make money doing one thing and then work on another, you have more freedom of choice.

Which route should you take? That depends on how sure you are of what you want to do, how good you are at taking orders, how much risk you can stand, and the odds that anyone will pay (in your lifetime) for what you want to do. If you're sure of the general area you want to work in and it's something people are likely to pay you for, then you should probably take the organic route. But if you don't know what you want to work on, or don't like to take orders, you may want to take the two-job route, if you can stand the risk.

Don't decide too soon. Kids who know early what they want to do seem impressive, as if they got the answer to some math question before the other kids. They have an answer, certainly, but odds are it's wrong.

A friend of mine who is a quite successful doctor complains constantly about her job. When people applying to medical school ask her for advice, she wants to shake them and yell "Don't do it!" (But she never does.) How did she get into this fix? In high school she already wanted to be a doctor. And she is so ambitious and determined that she overcame every obstacle along the way—including, unfortunately, not liking it.

Now she has a life chosen for her by a high-school kid.

When you're young, you're given the impression that you'll get enough information to make each choice before you need to make it. But this is certainly not so with work. When you're deciding what to do, you have to operate on ridiculously incomplete information. Even in college you get little idea what various types of work are like. At best you may have a couple internships, but not all jobs offer internships, and those that do don't teach you much more about the work than being a batboy teaches you about playing baseball.

In the design of lives, as in the design of most other things, you get better results if you use flexible media. So unless you're fairly sure what you want to do, your best bet may be to

choose a type of work that could turn into either an organic or two-job career. That was probably part of the reason I chose computers. You can be a professor, or make a lot of money, or morph it into any number of other kinds of work.

It's also wise, early on, to seek jobs that let you do many different things, so you can learn faster what various kinds of work are like. Conversely, the extreme version of the two-job route is dangerous because it teaches you so little about what you like. If you work hard at being a bond trader for ten years, thinking that you'll quit and write novels when you have enough money, what happens when you quit and then discover that you don't actually like writing novels?

Most people would say, I'd take that problem. Give me a million dollars and I'll figure out what to do. But it's harder than it looks. Constraints give your life shape. Remove them and most people have no idea what to do: look at what happens to those who win lotteries or inherit money. Much as everyone thinks they want financial security, the happiest people are not those who have it, but those who like what they do. So a plan that promises freedom at the expense of knowing what to do with it may not be as good as it seems.

Whichever route you take, expect a struggle. Finding work you love is very difficult. Most people fail. Even if you succeed, it's rare to be free to work on what you want till your thirties or forties. But if you have the destination in sight you'll be more likely to arrive at it. If you know you can love work, you're in the home stretch, and if you know what work you love, you're practically there.