DISTANCE 04

with essays by

Jeremy Mumenthaler

Nick Disabato

http://distance.cc

DISTANCE 04

concerns critique.

Wherein:

Jeremy Mumenthaler dissects notions of online identity and the products that try to solve our largest problems.

Nick Disabato critiques flat design, a popular approach to designing content-centric user interfaces.

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DISTANCE's essays don't exist in a vacuum. We encourage you to excerpt and discuss these essays with others. You have free reign to quote as much as you need to get your point across. Good writing begins conversations, and we're listening. Visit *Distance*'s website at http://distance.cc to read and remark on others' responses.

If you have any questions, email us at we@distance.cc and we'll make it right.

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Note on citations

Distance exists in quite a few forms: book, PDF, ePub, and Kindle. We know that people read all sorts of ways, and we want the text to fit your reading habits, not the other way around.

Most citation methods refer to a work's page number, but only two of *Distance*'s forms have discrete pages. Consistent, understandable citation by page number is impossible, so wayfinding must exist within the actual text.

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In an attempt to solve this problem, *Distance* doesn't have page numbers. Instead, each essay's paragraph has a little number to the right, as seen here. These numbers will always be consistent among each format of an issue of Distance.

This is similar to the convention of "purple numbers" in blogging, 1 and it will remove any ambiguity about what's being referenced. As a rule of thumb, where a page number would go, use the **paragraph number** instead.

For example, MLA citation should look like Whipple, Jon. "What Designers Know." *Distance* 01: 14–17 for the 14th through 17th paragraphs of Jon Whipple's essay in our first issue.

^{1.} See also CIM Community, "Purple Numbers", http://dsn.tc/o1x-o1 and Simon Willison, "PLinks", http://dsn.tc/o1x-o2.

More than ever, technology constraints have disappeared, and designers have their version of the mythical perpetual motion machine — a new medium where pixels are infinitely available and infinitely malleable. We should focus on setting them free.

—John Maeda, *The Future of Design Is More Than Making Apple iOS Flat*, at http://dsn.tc/o4x-o1

Online Personality Disorder

The tools we use to manage our internet voices.

by Jeremy Mumenthaler

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Over the past decade, I have been evolving my online identity. From LiveJournal to MySpace to Facebook to Twitter to Quora to Svpply, each of these services holds a small bit of myself. Maintaining all of these endpoints—and keeping each of them honest—has become a full-time job.

As time passes, our online world becomes more and more of our home. When we represent ourselves online, we assume an ever-strengthening identity: speaking with our own voice, or an organization's voice, a group's voice, an idea's voice, or even someone else's voice. We are constantly trying to figure out which voice speaks, and when. These voices can get confused; sometimes, they're neglected. In product design, we try to facilitate users' multiple identities in easy, intuitive ways—but over 200 sites claim to be social networks, and hundreds more contribute to your online identity in some small part.

Many services have found ways to bandage the problem, but we aren't out of the weeds quite yet. It's a routine we need to practice every day: to better understand each of these voices and to learn how to maintain them. Right now, password management, single sign-on, and managing digital associations can help us communicate who we really are—not only to the world, but also to ourselves.

I have an online personality disorder, and I'm looking for a cure.

^{1. &}quot;Confessions of Christy the Teenage Social-media-ite", nantanwithaplan, 7 Sep 2011. http://dsn.tc/04a-01.

^{2.} Jennifer Lewis, "Amusing Accidental Tweets from Popular Twitter Accounts", *Flavorwire*, 19 Jan 2012. http://dsn.tc/04a-02.

^{3.} See, for example, the social media presence of the Credit Union National Association: http://dsn.tc/04a-03.

^{4. &}quot;List of social networking websites", Wikipedia. http://dsn.tc/04a-04.

The symptoms

Our digital selves will never fully represent our physical selves. We have a habit of idealizing ourselves online; our digital personas are more charming, focused, and witty than our real-life counterparts.

We take our online identities for granted, too, although we began with the best of intentions. We thought we could remember to keep that profile updated, we knew which Twitter account we were logged into, and we knew that some people spell their names differently. But the less we maintain our identities, the more we're at risk of losing control of them.⁵

Meanwhile, the more we add to the web, the more our identities grow. Every single minute, there are 27,000 new Tumblr posts, 684,000 new bits of Facebook content, 48 new hours of new YouTube videos, and 3,125 new Flickr photos. This roughly fulfills Fremont Rider's prediction in the 1940s that libraries will double their capacity every 16 years. As our capacity for holding information increases, the rate of creation increases in turn.

In the early days of the web, pseudonyms were king: people adopted preposterous usernames like QTpie18483134852,8 AdolphHipster,9 and Johnny69,10 which had no connection to their real names:11 as mentioned in *Forbes*, "in the old web, Anonymity was another name for Freedom".12 Some

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^{5.} Lori Turner-Wilson, "Online Reputation Could Be Killing Business", *Memphis Daily News*, 16 Jan 2013. http://dsn.tc/04a-05.

^{6.} Zack Whittaker, "How much data is consumed every minute?" *Forbes*, 22 Jun 2012. http://dsn.tc/04a-06.

^{7.} Fremont Rider, *The Scholar and the Future of the Research Library*, New York: Hadham Press, 1944.

^{8. &}quot;AOL/AIM Guide for the Perplexed 90s Child", *Children of the 90s*, 24 Nov 2009. http://dsn.tc/04a-07.

^{9. &}quot;What Are the Best Usernames You Have Seen?" Giant Bomb. http://dsn.tc/04a-08.

^{10.} johnny69, Cheezburger.com. http://dsn.tc/04a-09.

^{11. &}quot;Cool Screen Names for Myspace, MSN, ICQ, Aol, Facebook, Twitter, Aim and more!" *Mystical Gateway*. http://dsn.tc/o4a-1o.

^{12.} Benoit Raphael, "GOOGLE+. Why Discussions about 'Real Names' Are Out-of-date", *Forbes*, 18 Aug 2011. http://dsn.tc/04a-11.

new, casual internet users desire this secrecy, but even in the masked world of online forums, people are still curious who is behind a name. 13

Instead of representing the lack of a physical space, the internet has now become its own place. It's where we meet for casual conversation in Google Hangouts. We present work on Join.Me. We begin and end intimate relationships on Facebook and OkCupid. We can be bullied; we can be martyred. We give and take as citizens of this place. 14

As the internet became a practical extension of our real world, we started relying on it to handle our relationships, finances, and the majority of our communication. In turn, we became more comfortable with being ourselves. Being real fosters a trust you can't get from anonymity, which can result in more meaningful, long-lasting relationships. ¹⁵

The results

I'm writing this essay because of the relationships established through my digital identity. The first realization of how powerful these connections can be came from an ambitious friend of mine.

Hiroki ¹⁶ started following my coworker after seeing a talk he gave in Japan. After replying to a tweet looking for interested developers, Hiro jumped on a flight from Tokyo to Chicago and began learning how to design and develop websites. He picked up his life and moved it halfway around the world, all based on a relationship to a community on the internet.

Hiro has become a great friend and colleague of mine. He taught me the power of showing up on the internet. It is part of his everyday practice to communicate and reach out to the people he admires from afar. Your heroes are only a tweet away from being friends.

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^{13. &}quot;Screen name to real name," The Mustang Authority. http://dsn.tc/04a-12.

^{14.} Amanda Lenhardt et al., "Teens, kindness and cruelty on social network sites", *Pew Internet*, 9 Nov 2011. http://dsn.tc/04a-13.

^{15. &}quot;Internet Dating Much More Successful Than Thought", *ScienceDaily*, 23 Feb 2005. http://dsn.tc/04a-14.

^{16.} http://mnmly.com.

Four identity patterns

In the past decade, we have seen four significant approaches to managing identity problems. As an information architect and developer, I know that these aren't always built into new products, and it is very difficult to change your product's data model after people begin to use it. That said, identity-related products vary in how many connections they explicitly provide, how much their users trust them, and how efficient they are.

MANY UNRELATED ACCOUNTS

Most common services web services allow users to have many unrelated accounts; you can only sign in to one account at a time. ¹⁷ This model assumes that you have *one account per voice*, with each account mapped to a single creator. ¹⁸ Power users have many accounts for each of these services, and each of them requires logging in and out of the website. ¹⁹ Unfortunately, logging in and out of different user accounts can cause user fatigue. ²⁰

RELATED AND UNRELATED ACCOUNTS

Another common pattern is many related and unrelated accounts, encompassing most online banking sites, Google Apps, email services, and shared calendars. We often have multiple accounts with a bank—checking and savings, for instance—but we have only one login to manage them. We can share information between these accounts—among several Google Apps accounts, for instance—or sometimes we want them to be completely separate, as with corporate and personal checking accounts. Both options are possible.

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^{17.} Examples of this include Twitter, Vimeo, and PayPal.

^{18.} The creator may be a group, but that group generally acts as a single entity.

^{19.} Twitter reccomends using TweetDeck to handle multiple accounts smoothly. See also "Getting started with TweetDeck", *Twitter Help Center*. http://dsn.tc/04a-15.

^{20.} Andy Jankowski, "4 ways to prevent log-in fatigue at work", *ragan.com*, 9 Apr 2012. http://dsn.tc/04a-16.

ONE ACCOUNT, ONE VOICE

LinkedIn, TripIt, Quora, and personal Facebook accounts have *one account* and one voice. These services try to match each account with one person. This model requires us to have a clear connection between our digital and physical selves. Studies have argued that online anonymous communication should be considered a strong human and constitutional right, though, ²¹ and many people like the web's dissociative and anonymous nature, preferring to escape from the real world. Others prefer to use the web as a part of their everyday lives, linking their accounts to their real identities.

ONE PERSON, MANY SUB-ACCOUNTS

This provides *sub-accounts*, *permissions*, *and groups* for one account. Services like Facebook, 37signals' Basecamp, and Tumblr allow a user to be a part of multiple groups, but the user still retains their own identity.

This is where we're heading. Web services can't ignore the need for multiple voices for each user. Basecamp and Facebook allow us to seamlessly change our voice based on our needs and context. If you are part of an organization on Facebook, you can post as that organization on its wall, and then you can turn around and post as yourself on your own page. If you have a 37 signals account, you only need to be invited to any group in their system.

Examples

These models are heading in the right direction, but the problem really stems from associating yourself with many digital voices. I'd like to analyze a few products that attempt to solve this problem.

1Password keeps track of your accounts and their passwords. Facebook's open authentication is an API service that allows other verified services to accept someone's Facebook login to verify their identity. And claimID is aimed at housing the connections and disconnections of content that form your digital identity.

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^{21.} Al Teich et al., "Anonymous Communication Policies on the Internet", *Information Society* 15 (2):71–77, 1999. http://dsn.tc/04a-17.

1PASSWORD

If you've never forgotten a password, you don't have secure password practices. Strong passwords are long, complex, and unique, ²² and it doesn't take much time for a computer to crack the passwords that most people pick. ²³ Covering these bases while also adhering to unique password requirements generally creates an unmemorable password. ²⁴

The folks at AgileBits try to solve this problem with 1Password, ²⁵ which provides a database of all of your secure information. For each login you have, you save a site's URL, your login credentials, and an automatically generated, secure password. Your accounts are well-organized and strongly encrypted. In this digital safe, you can store all the information you can never remember, but always need to refer to. From your desktop, browser, or mobile device, your information is stashed behind one master password.

1Password is completely service-agnostic, facilitating access to all of one's voices. Although it gives you many different categories with different associated metadata, it really just stores any key and its value. With the desktop application, browser extensions, and mobile app, you can log into any service from virtually anywhere. It can be used for complicated user authentication—banking logins, for instance—or your gym locker combination lock. Everyone uses it differently, but that's part of its beauty. Most people will just use it as a password database. Some will take advantage of 1Password's encrypted notes. Others save their corporate credit card numbers or software licenses.

Imagine you have several Twitter accounts. ²⁶ With a keyboard shortcut on Twitter's site, 1Password asks you which account you'd like to log in with. You choose one, log in, and you're ready to tweet.

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^{22.} Microsoft Safety & Security Center, "Create strong passwords". http://dsn.tc/04a-18.

^{23. &}quot;How Secure Is My Password?" http://howsecureismypassword.net.

^{24.} Jamie Saine, "The Most Secure Password Ever (Good Luck Remembering It)", *In-The-Wild Testing Blog*, 14 Jun 2012. http://dsn.tc/04a-19.

^{25. 1}Password. http://dsn.tc/04a-20.

^{26.} Several Twitter accounts isn't uncommon. See also Michelle Rafter, "When One Twitter Account Is Not Enough", *Twitip*, 6 Apr 2009. http://dsn.tc/04a-21.

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iPassword's interface works hard to gain your trust. You can't do anything without entering your master password, which engenders confidence and trust. The initial screen is a secure-looking safe door, with a large input field for your master password. Showing the safe door *over* all of your information reinforces the concept of security. This works better than a more traditional pop-up notice, because the same window contains all of your information: you just don't have access to it until you enter your master password. Even its unlocking sound and animation works well, providing helpful feedback when logging in; most of the time, this would be skeuomorphic overkill. After a few minutes of inactivity, you hear it lock again, securing your information.

Once you are in, though, the interface appears a bit heavy-handed. Paperclips, page curls, and odd proportions clutter the interface. Where 1Password's lock-and-key branding is on the brink of excess, inside it looks more like a default Mac app. I'm only a little surprised that Marker Felt isn't the standard typeface for 1Password's secure notes.

The first year I used 1Password, I didn't even use the desktop app. I only used the browser extension, which works smoothly as long as you are constantly using it. If you only use it for some of your logins, it can quickly become another thing to remember. The installation process is a bit quirky, mainly due to web browsers repeatedly updating their plugins to keep pace with new developments in browser technology.

After logging into a website, 1Password's browser extension asks if you would like to save that information into your encrypted database. Entering your master password saves it. This commits your master password to memory while adding to the database's utility. It does a good job of collecting information for you to use in the future, but trying to find a password later sometimes only makes it harder to log in.

Agile Bits has done a great job focusing on the main tasks, though. While there are plenty of features included with 1Password, the primary problem has been solved, and it is kept in the foreground. You could spend lots of time configuring and crafting everything into neat, searchable information, or you can just install it and let it work its magic.

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1Password's seamlessness works in its favor. You pull up your online banking website, press a keyboard shortcut, and 1Password does the remembering for you. Design encompasses more than just the look and feel of an interface: it embodies the product as a whole. This sought-after "just works" quality is one of the key consequences of 1Password's successful approach.

1 Password isn't the only product in this space: LastPass²⁷ and SplashID²⁸ are the most similar. LastPass is a browser-based free alternative, and SplashID looks as if there wasn't even a designer in the town it was created in. You could also save your passwords in Apple's OS X Keychain. All modern browsers have some sort of password 'saving' technology, but 1Password's universal approach makes it stand out. 1Password isn't a truly *great* design, but it's on the right path, and it's the best option for this type of product.

FACEBOOK LOGIN

Many recent services have abandoned their own custom account systems, instead favoring 'Sign in with Facebook' or 'Sign in with Google' buttons. These one-click solutions use your already existing accounts, taking advantage of a technology called Open Authorization, or OAuth for short.²⁹

OAuth is a standard for authenticating and sharing information with any service. When signing up, you need to verify that you are who you say you are. Generally, this means you have to verify your email address. While anyone can create an email address, OAuth requires you to provide information about it, which deters abuse.

Many have made the case against using services like these, claiming that it puts too much power in the hands of Google, Twitter, or Facebook, but I personally find it depends on the service and careful assessment of your users' needs. 30

^{27.} https://lastpass.com.

^{28.} SplashID. http://dsn.tc/04a-22.

^{29.} http://oauth.net.

^{30.} Aarron Walter, "Social Login Buttons Aren't Worth It", *MailChimp Blog*, 12 Oct 2012. http://dsn.tc/04a-23.

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Of all the services using OAuth, Facebook's is the most common. A community gives more validity to your identity; Facebook's billion-plus users provide *social verification*, confirming that you've spoken the truth. As we put more of our information into Facebook, we find we want to use it elsewhere.

On top of that, Facebook requires you to provide your real name, as marked on your ID or credit card, ³¹ and they have asked some users to verify that their names are real. ³² (This policy has bled into the real world, too: German artist Tobias Leingruber provides physical identification cards with your Facebook information printed on them.) ³³

Last year, Facebook reported that the number of fake users was under 10% of their 1.1 billion users in total, ³⁴ "feel[ing] strongly that [their real name] policies provide greater accountability and a safer and more trusted environment across the site". ³⁵ We can have some confidence that someone is a real person, but Facebook's actions emphasize a broader power struggle to be the center of your online identity.

Nearly two-thirds of Facebook's users have taken a break at some point, and many others opt out for personal, professional, or political reasons.^{36,}
^{37, 38} A Pew Internet study about users leaving Facebook quoted some who left: "You get burned out on it after a while", "it caused problems in my [romantic] relationship", or "it was not getting me anywhere".³⁹ But in quitting

^{31.} Facebook, "Facebook's Name Policy". http://dsn.tc/04a-24.

^{32.} Laurel Sutton, "ID, please: Facebook Won't Allow 'Batman", *catchword*. http://dsn.tc/o4a-25.

^{33.} Social ID Bureau. http://fbbureau.com.

^{34.} Nishtha Kanal, "Facebook report reveals 76 million accounts were 'fake' last year", *tech2*, 2 Feb 2013. http://dsn.tc/04a-26.

^{35.} Barry Schnitt, "Responding to Your Feedback", *The Facebook Blog*, 5 Apr 2010. http://dsn.tc/04a-27.

^{36.} Lee Rainie, Aaron Smith, and Maeve Duggan, "Coming and Going on Facebook", *Pew Internet*, 5 Feb 2013. http://dsn.tc/04a-28.

^{37.} Max Temkin, Maxistentialism. http://dsn.tc/04a-29.

^{38.} More examples are available at http://www.quitfacebookday.com.

^{39.} Lee Rainie, Aaron Smith, and Maeve Duggan, "Coming and Going on Facebook".

Facebook, people lose one of the most powerful identity systems that the web has to offer. Facebook has the most OAuth connections of any provider right now. ⁴⁰ Some make up for that lost connection through App.net, Twitter, Google, or LinkedIn—but without Facebook, one can miss out on creating accounts on many sites.

Facebook's login interface plays into the idea of authenticity. As Facebook design director Kate Aronowitz said, "We don't want people to remember their interactions with Facebook, we want them to remember their interactions with their friends and family." ⁴¹ Their login process reflects this by showing only enough Facebook branding to provide trust in the platform. You have a place on Facebook to call your own; it has your name, photo, and identifying information. By using Facebook's consistently familiar login button, you can easily access your own identity.

Instead of building complicated systems to manage their users' online identities, the creators of web applications can leverage Facebook's popularity and entrenched infrastructure. Facebook's OAuth API is easy enough for any web service to implement. By using their "Registration" plugin, it only requires a code snippet and a developer account to access a prospective user's information. ⁴² This helps small sites get users up and running quickly, and it helps larger sites engage their users.

I have used Facebook's OAuth for account creation on The Noun Project,⁴³ and it encourages the idea that an account is mapped to a single human being. With one click, a user can start using our service. There's no new password to memorize, no extraneous form fields to fill in. Their design team is constantly making small adjustments in efforts to improve its usability—which is one more set of details I don't have to worry about.

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^{40.} Josh Constine, "How Big Is Facebook's Data? 2.5 Billion Pieces Of Content And 500+ Terabytes Ingested Every Day", *TechCrunch*, 22 Aug 2012. http://dsn.tc/04a-30.

^{41.} E.B. Boyd, "Thank Facebook's Design Team For Every Warm and Fuzzy Moment You've Ever Had on the Social Network", *Fast Company*. http://dsn.tc/o4a-31.

^{42.} Facebook, "Registration Plugin". http://dsn.tc/04a-32.

^{43.} The Noun Project. http://thenounproject.com.

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Once Facebook's login has established that you're a real human, connecting different services helps craft your voice, tying your actions together across many sites and services. Having a central account eases account creation, login, and unification of your voice.

It does, however, restrict users to those with Facebook accounts, which could pose a problem for people who wish to keep their login mechanisms under one roof. Reliance on Facebook's brand may also conflict with your own aesthetic or branding goals.⁴⁴ Even though it has several tradeoffs, using Facebook's OAuth features can be a benefit to app designers and users alike.

CLAIMID

As doctoral students from the University of North Carolina, Fred Stutzman ⁴⁵ and Terrell Russell ⁴⁶ were interested in creating a system to see how people associate themselves to their digital identities. Their research started with the idea that one's identity can be deduced from search results for their own name. ⁴⁷ We know that on the internet, we are who Google says we are; most of us have Googled ourselves at some point. ⁴⁸ They wanted to find a way to craft that identity, to bring more control into someone's hands.

ClaimID⁴⁹ addresses this by allowing people to verify their identity using OAuth or OpenID, and collecting links to all of their online personas. They built an easy mechanism to weigh a search result's association to your digital identity, and then they separate each result into four categories:

^{44.} For one example of this, see Aarron Walter, "Social Login Buttons Aren't Worth It".

^{45.} Fred Stutzman, claimID. http://dsn.tc/o4a-33.

^{46.} Terrell Russell, claimID. http://dsn.tc/o4a-34.

^{47.} Terrell Russell and Fred Stutzman, "Self-representation of online identity in collected hyperlinks", *Proc Am Soc Info Sci Tech* 44: 1–4, 2007. Available in full at http://dsn.tc/04a-35.

^{48.} Slashdot poll, "How often do you Google yourself?" http://dsn.tc/o4a-36.

^{49.} http://claimid.com.

About You, By You	Not About You, By You
About You,	Nothing to Do
By Someone Else	With You

Quadrant one is all about you: content that is **about you and created by you.** This includes your personal profiles, blogs, and photos. We generally link these places from our own personal websites.

Quadrant two represents what you give back to the internet: content **you create that isn't about you.** Articles you have written, your portfolio of client work, and your contributions to forums would all go here.

Quadrant three is for biographical information: for content **about you by someone else,** including press about you and your company, interviews, and your Wikipedia page.

Quadrant four is the *alibi bucket* for content that **isn't about you or created by you**, but may end up in your Google results. This is for the content you want to disassociate yourself from. It may be related to someone with the same name, or even an embarrassing photo or article.

ClaimID does a great job of collecting your links and influencing web search results. As Google tweaks its algorithms, though, it becomes increasingly difficult to sway its results in your favor.

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The project seems to indicate that Fred and Terrell were more interested in their research than in building a product. The interface lacks its own voice, feeling more institutional than something I would use everyday. Services need to be clear and simple in their use and function, but ClaimID feels like homework from the beginning.

Fred and Terrell remain ClaimID's sole developers, maintaining it between their academic work, but since its launch it has fallen into disrepair. Even so, they were successful in guiding the conversation around what an online identity is and what direction it should take. From their research, we learned that we can leverage content created on other networks as a means of establishing our identity.

The Future

These products pave the way for the future of our online identities. In a perfect world, we'll have full control over our identities, which can then be shared across any services we'd want to use. This system has to be flexible and seamless enough for us to speak from any one of our voices at any given time. Although many of these problems are addressed with Facebook Login, 1Password, and ClaimID, we still have a long way to go.

Some people think there needs to be a password standard, which would greatly resolve—or perhaps entirely eliminate—the issues we've covered. OAuth is making headway, and Facebook is trying to become its biggest provider, but we haven't reached a consensus yet.

While we wait, 1Password and ClaimID can help us. These products have their flaws, but they can aid us by cataloging our details. In a perfect world, these tools wouldn't be necessary.

I use IPassword to keep track of my accounts, and that puts me at ease, knowing that I'll never forget a password and my information can stay somewhat centralized. I maintain long, complex passwords and change them religiously. I like to think of this process as maintenance for my identity. If the voice I use for a product is similar to my voice on Facebook, though, I'll sign in using Facebook Login whenever it's available.

As my online identity continues to evolve, I will always have trouble sorting out my voices. Like many disorders, though, I can manage it with the right tools—until we find a cure.



Looking at flat design from its sides.

by Nick Disabato

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'Bebop' was a label that certain journalists later gave it, but we never labeled the music. It was just modern music, we would call it. We wouldn't call it anything, really: just music.¹

I'M MAKING A WEBSITE IN MY BEDROOM IN 1998. Frustrated with what I viewed as a sort of heavy-handed, graphical maximalism at the time, I made my personal site gray on gray, 12px Verdana, with solid lines everywhere. It was my first foray into blogging, and there wasn't a curved line or drop shadow to be found. The blog became moderately successful—by a 16-year-old's standards in 1998, at least.

I'm making a website in my dorm room in 2003. By this point I had become frustrated with my work, and too caught up in my classes and jobs to pay much attention to the web. I didn't realize it back then, but this was the first of a string of redesigns that would form the routine I maintain to this day: redesigning my site about four times a year, and spending only a day on it each time.

I'm making a website at my first real adult job in 2007—and it isn't my own. I've been given a Photoshop comp and was asked to chop it into HTML and CSS. Fine by me—wait, are those *rounded corners?* No browser can support th—wait, are those *drop shadows?* Okay, time to call the boss to my desk.

I'm reworking *Distance*'s website in 2013. As the publisher, I'm always fiddling with how everything is presented. Upgrading it to be Retinacompatible, I made the header into an SVG. The hover state provided a different background, making the text look like it sits on a rounded rectangle, and making the rectangle look like it sits on top of the background. Three layers, no drop shadows—but now I can use rounded corners.

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^{1.} Kenny Clarke, from Paul Du Noyer, *The Illustrated Encyclopedia of Music* (1st ed.), London: Flame Tree Publishing, 2003, p. 130.

In September 2012, LayerVault founder Allan Grinshtein wrote a blog post² about "the Flat Design Era", saying that after considerable rework of his product's interface, his team arrived at something approaching a purity of form:

We certainly didn't invent the flat style but arriving at it was a violent process. We tore through hundreds of revisions (we have the LayerVault timelines to prove it) to potential interfaces before arriving at the answer that now makes us say "of course"...

When we returned with clear heads, we stripped the design down to the bone. It looked closer to a wireframe than a final interface—but it was a start, and it was damn honest.

It was something I had believed in so strongly for so long, but now it had a name and everyone was talking about it. "Flat design" has dominated my corner of the internet ever since this post was written. It was named one of 2013's trends³ by major design publications. In January, Quora designer David Cole expressed his reservations about it.⁴ In March, according to siteInspire founder Daniel Howells, we reached flat design's peak⁵—but it didn't even take that long before we started to see⁶ the first parodies, with a "shake to shoot" camera that could only end in terrible photos. And *that* was before iOS 7's announcement in June 2013, showing many cosmetic, if not interactional, characteristics of flat design.

^{2.} Allan Grinshtein, "The Flat Design Era", LayerVault Blog, 25 Sep 2012. http://dsn.tc/04b-01.

^{3.} Sam Solomon, "Web Design Trends for 2013", Signal Tower, 12 Feb 2013. http://dsn.tc/04b-02.

^{4.} David Cole, Tweet on 27 Jan 2013. http://dsn.tc/04b-03.

^{5.} Daniel Howells, Tweet on 5 Mar 2013. http://dsn.tc/04b-04.

^{6.} John Casasanta, "10 Million Camera+ Copies Sold! (and a snark peek at Camera+ 4)", tap tap tap Blog, 31 Jan 2013. http://dsn.tc/04b-05.

Grinshtein came the closest that we yet have to a formal definition of "flat design," but it has many properties:

- · An apparent lack of 3-D spatial relationships. Shadows are frowned upon, instead elements are kept separate from one another.
- · An insistence on relatively saturated, primary colors.
- · Spareness in how much content is presented, and a heavy insistence on white space as a result.
- · Use of thicker strokes in iconography.
- · Soft gradients between analogous colors.
- · Sans-serif typefaces more often than serif typefaces, with a special focus on Swiss-style grotesques such as Helvetica and Akzidenz-Grotesk.

And it has many examples, including:

- · Clear, 7 a todo list app;
- · iA Writer, 8 the text editor that I used to write this essay;
- · shopping site and eBay subsidiary Svpply;9
- · music streaming site Rdio; 10
- · iOS word game Letterpress; 11
- · Windows 8, Microsoft's radical redesign of its flagship operating system; 12
- · and iOS 7.

Moreover, flat design was posed in opposition to **skeuomorphism**, or the notion of connecting technological interface elements to real-world items. Numerous pre-iOS 7 Apple products, such as Find My Friends, Calendar, and Game Center, used faux leather stitching, blackjack tables, and wooden bookshelves to evoke a stylized, metaphor-heavy atmosphere.

^{7.} Clear. http://dsn.tc/o4b-o7.

^{8.} iA Writer for Mac. http://dsn.tc/o4b-o8.

^{9.} https://svpply.com.

^{10.} http://rd.io.

^{11.} Letterpress – Word Game. http://dsn.tc/o4b-o9.

^{12.} Microsoft, "Windows 8". http://dsn.tc/04b-10.

But flat design appears to have its origins in Microsoft, ¹³ who began creating flatter products in 2009. When then-industrial designer—and outspoken minimalist—Jonathan Ive was tapped to lead Apple's software efforts, many speculated that it might be the end of leather stitching. ¹⁴ It seems that everyone's suspicions have been confirmed.

Skeuomorphic debates have existed since at *least* 2007, when the "brushed metal" interface of Mac OS X was apparently pushed out in favor of a cleaner aesthetic. ¹⁵ Or maybe it was 2004, ¹⁶ when people thought it contradicted Apple's Human Interface Guidelines. ¹⁷ Or perhaps it was in 1995, when the outrageously bad Microsoft Bob ¹⁸ was released, showing your "desktop" as a living room, replete with pet dog.

In this essay, I'll discuss the following:

- The relationship between flat design and "simplicity", oft-discussed as a design ideal by Kenya Hara, ¹⁹ John Maeda, ²⁰ and Don Norman ²¹ (although the latter has since reneged on his statements); ²²
- That flat design's supposed "war" against skeuomorphism is a false dichotomy;
- · The ways in which flat design works and fails as an overarching concept;

^{13.} Nick Bilton, "The Flattening of Design", *The New York Times*, 23 Apr 2013. http://dsn.tc/04b-11.

^{14.} Daniel Eran Dilger, "Jony Ive's minimalist designs could reshape the future of iOS, OS X", *Apple Insider*, 30 Oct 2012. http://dsn.tc/04b-12.

^{15.} John Gruber, "An Anthropomorphized Brushed Metal Interface Theme Shows Up for the WWDC Preview Build of Mac OS X Leopard", *Daring Fireball*, 9 Jun 2007. http://dsn.tc/o4b-13.

^{16.} John Gruber, "Brushed Metal and the HIG", *Daring Fireball*, 16 Oct 2004. http://dsn.tc/04b-14.

^{17.} Apple, "OS X Human Interface Guidelines", Mac Developer Library. http://dsn.tc/o4b-15.

^{18.} See also Jeff Atwood, "The Only Truly Failed Project", Coding Horror, 19 Aug 2009. http://dsn.tc/04b-16.

^{19.} See also Kenya Hara, Designing Design, Lars Müller, 2007.

^{20.} John Maeda, *The Laws of Simplicity*. http://lawsofsimplicity.com.

^{21.} See Don Norman, The Design of Everyday Things, Basic Books, 2002.

^{22.} See Don Norman, Living with Complexity, MIT Press, 2010.

And a potential way forward that may integrate concepts both inside and outside flat design's scope.

Historical overview

The [furniture and housewares store] MUJI table is simple but never geometrically plain. It's important that both the 18-year-old starting in on the single life and the couple in their 60s think "this is nice" in the same way. We are not designing a simple living room table for the youngster and a table that can be used in the older couple's bedroom. By making a table with the simplest design possible, we create a table that will adjust to a variety of living environments and will be suitable to any stage of life. This is "quality" as MUJI sees it. ²³

One fundamental precept of flat design is to remove any useless information from the interface. Designers frequently aspire towards a reduction of form into the simplest essence of the material or product. We can assume flat design's purveyors hold a similar ideal as Jonathan Ive: ²⁴

Simplicity isn't just a visual style. It's not just minimalism or the absence of clutter. It involves digging through the depth of the complexity. To be truly simple, you have to go really deep. For example, to have no screws on something, you can end up having a product that is so convoluted and so complex. The better way is to go deeper with the simplicity, to understand everything about it and how it's manufactured. You have to deeply understand the essence of a product in order to be able to get rid of the parts that are not essential.

They may take John Maeda's first law of simplicity to heart:

The simplest way to achieve simplicity is through thoughtful reduction.²⁵

13

^{23.} Kenya Hara, Designing Design, pp. 278-9.

^{24.} Jonathan Ive, quoted in Walter Isaacson, Steve Jobs, Simon & Schuster, 2013.

^{25.} John Maeda, The Laws of Simplicity, MIT Press, 2006, p. 1.

And in all these simple constraints lies some very difficult design problems. Simplicity may bring clarity to a product, but if it isn't executed well, if it doesn't bring a degree of utility to the user, then it will fail.

Such work was evident in mid-century modern furniture, whose creators attempted to infuse considerable detail into spare, geometric pieces. As Charles and Ray Eames said, "the details are not the details. They make the product." ²⁶

In subsequent graphic designs, leaders like Paul Rand and Saul Bass worked with the same sorts of primary colors, high contrast, sans-serif type-faces, grid systems, and uncomplicated geometries that mark flat design today. And *they* were influenced by the Bauhaus and Constructivist movements, ²⁷ both of which brought minimalist approaches to architecture and furniture design. Flat design's roots—or at least the sentiments behind them—run deep, and they connect with hardware (cf. Monome's controllers, ²⁸ Teenage Engineering's OP-1 synthesizer ²⁹), architecture, and industrial design just as much as they do with software.

The same sentiment appears today. Frank Chimero outlines the relationship between simplicity, clutter, and clarity: 30

Delightful design also adds clarity by finding the balance between adding details for resonance and taking them away for simplicity. When the two are balanced correctly, we're left with a design that shows up when it offers something of value, and then gets out of the way when it is not needed. Sometimes, more must be added to give clarity to the work, such as how a map may have added guidance along with street names to make it easier to navigate; but usually value and delight are created by taking things away and reducing friction.

15

16

^{26.} Charles & Ray Eames, from a film recorded for furniture they designed, as quoted in Ralph Caplan, "Connections: The Work of Charles and Ray Eames", *Eames Office*. http://dsn.tc/o4b-17.

^{27. &}quot;Paul Rand", Design History Mashup. http://dsn.tc/04b-18.

^{28.} http://monome.org.

^{29. &}quot;Teenage Engineering OP1", *Amazon*. http://dsn.tc/o4b-19.

^{30.} Frank Chimero, *The Shape of Design*, pp. 105-106. Available in full at http://dsn.tc/04b-20.

20

21

If we take the thoughtful reduction of elements as a precept of our work, and the erasure of content that doesn't fit a functional purpose as another, flat design follows as a not-unreasonable conclusion. Drop shadows, many gradients, frilly logos, and dissonant colors can be reworked and removed in favor of the aesthetic approaches that we've come to see from LayerVault, Windows 8, and iA Writer—and any other types of products that claim "flat design" as a creative anchor, which tend to be equally spare in their feature sets.

With its focus on common sans typefaces, graphical spareness, and solid colors, flat designs want to divorce content from presentation—or to make content the *entire* presentation. You are unlikely to see flat design in a more visually busy, "dashboard"-like layout; although you could argue that Ableton Live accomplishes this handsomely, it remains the exception because most of the people working on flat design have different goals for the tools they wish to create.

Products

To emphasize style is to slight content, or to introduce an attitude which is neutral with respect to content.³¹

It's worth exploring and critiquing some of the precepts behind flat design, because we're likely to see more of this work in the future, and some of this work has significant reach among all types of consumers.

A clean desk: iA Writer

iA Writer is a plaintext word processor for Mac and iOS. It's one of several in the category of "distraction-free" writing and editing apps, initially begun by Ommwriter—and it's one of the most commercially successful. With a saturated blue cursor and a typewriterly slab-serif monospace as the only available font, iA Writer has defined itself more in terms of what it *doesn't* have. The Mac keyboard shortcut to change font settings, \mathbb{H}-T, triggers an error beep: use our settings or find alternative software.

^{31.} Susan Sontag, Notes on "Camp", 1964. http://dsn.tc/04b-21.

24

The more you think about how you use your writing tool, the less energy you have to think about your writing. Building an app with fewer features is much harder than adding a bunch of settings and letting the user decide.

But creating those features often involves custom solutions that are programmatically and logistically difficult:

[We invested] a lot of energy into details like cursor definition (it took us months to make that cursor work), typography, transitions, fades, and tiny shapes.

Although iA Writer looks and feels like a Mac app, many of its details were built from the ground up. The header bar disappears when you begin typing, and the behavior that controls its reappearance seems to be custom. The text fades off the top and bottom of the screen—also custom. As Reichenstein notes, the cursor is custom—a light blue—and it's memorable enough to be prominently featured in its dock and home screen icons. ³³ The switch for "focus mode," which dims all text but the sentence you're working on, looks similar to conventional iOS toggles, but it's thinner and the same shade of blue as the cursor. The custom nature of iA Writer's elements are apparent to those with an eye for detail, but they're conventional enough to be familiar, and the details of each element's behavior have been determined in a comprehensive, deliberate way.

What is the purpose of iA Writer's custom tweaks? Can't they simply use what Apple's operating system guidelines have given them? And for that matter, why shouldn't we all just use TextEdit, the stock text editor that comes with every copy of Mac OS X? For the most part, it comes down to goals. We have vastly different priorities when we're in a plain text editor versus a word processor.

^{32.} Oliver Reichenstein, "iA Writer: On Prices and Features", *iA*, 16 Jun 2011. http://dsn.tc/o4b-22.

^{33.} On a personal note, I never thought I would ever see a product whose cursor merited special mention.

27

28

When I'm working in iA Writer, I want to write. iA Writer is a terrible environment for programming or editing HTML—but a great environment for writing large amounts of plain text. The commercial and critical success of iA Writer indicates that their design decisions created a high-quality writing environment.

But what makes for *quality* in a writing environment? That's an extremely squishy and relative term. ³⁴ I personally use iA Writer because it supports HTML shorthand Markdown natively—and because, somehow, I'm much faster writing in it than in any alternative. I don't second-guess myself. When I use it in full screen mode, I don't have email or instant messages bothering me. Writing in Markdown has become second nature, and it's taught me that I don't have to worry about proper markup the first time around. What matters is *always* the writing.

It's hard to quantify satisfaction. Reichenstein set out to create happier writers: 35

To increase the pleasure of writing is exactly what we intended when creating Writer. A better tool doesn't make a better craftsman, but a good tool makes working a pleasure.

With that in mind, what is the relationship of iA Writer's design decisions to flat design? Was flat design settled upon deliberately, or was flat design the natural consequence of their creative processes? From looking at iA's official blog and their employees' blogs, "flat design" is never mentioned by iA themselves, but Writer is frequently held up as an example of the style. Based on this, I believe flat design was arrived at relatively organically—that, or they simply chose not to discuss it in their literature.

Does flat design create a better writing environment, with more satisfied writers and higher-quality writing? The success of Writer appears to bear that out, but will that hold true in the long term? User needs could change over time, and people would end up desiring things that iA Writer doesn't provide:

^{34.} For more on exactly *how* thorny, you might enjoy Robert Pirsig's winding, semi-autobiographical novel about his explorations into quality, *Zen and the Art of Motorcycle Maintenance*.

^{35.} Oliver Reichenstein, "iA Writer for Mac", iA, 28 May 2011. http://dsn.tc/04b-23.

a different markup shorthand, perhaps, or a different typeface, or richer text. As technological needs change, so do our tools. And what *then?*

When flat design isn't: Letterpress

Letterpress is a competitive one-on-one word game for iOS. Its graphics engine was made from scratch, and with its simple shapes and rounded corners, it's frequently held up as a great example of flat design. Default blue and red shades keep the color palette relatively simple, and the use of square tiles and spare animation provide a clear focus on the game play.

Loren Brichter, Letterpress's creator, spends a lot of time focusing on intuitive, useful animations in his designs. As the progenitor of the influential "pull to refresh" design pattern in his first app, Twitter client Tweetie³⁶ (which later became Twitter's official iPhone client), Brichter spends a great deal of time on the details in what happens *between* each interaction step: how the interface responds, what the transition looks like, and how things animate.

In an interview in the MacStories blog, Brichter elaborates: 37

Q: Speaking of which, I was reminded of Clear several times upon playing Letterpress. Mainly because you basically got rid of as much UI as possible. Was that a deliberate choice, or did it just come natural?

Loren: The style of the game embodies my (still evolving) personal aesthetic. I really dig the modern look of Windows Phone, but this is a touch more human. Even though it's mostly flat, there are subtle shadows when you drag tiles, or pop up a dialog. The human eye has evolved to notice details like that, I think it helps.

Letterpress enforces a relationship of depth throughout the application. When selecting a game, you zoom into its preview image, rendering the game board in the process. When picking up a tile, a shadow appears. When playing

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^{36.} Erica Ogg, "Pull-to-refresh' inventor launches new iOS game, Letterpress", *GigaOM*, 24 Oct 2012. http://dsn.tc/04b-24.

^{37.} Federico Viticci, "A Conversation with Loren Brichter", *MacStories*, 24 Oct 2012. http://dsn.tc/04b-25.

a word, the tiles "fall" out of the row into their original places. Fortunately, Brichter delineates the difference between *purely flat* design and the subtle drop shadows that he implemented in Letterpress—as well as the unfortunate skeuomorphism in Game Center, mercifully removed in iOS 7, which Letterpress relies on to save game data:

Q: Which is kind of funny when you see the poker felt table Game Center brings up.

Loren: Don't get me started.

Amusingly, Letterpress's home screen icon isn't flat at all, with faux letterpress (as in the printing technique) biting through thick card stock. Also, analyzing the app bundle reveals that Letterpress has only one image, with everything else set up as vector art. 38

While Letterpress is frequently cited as a good example of flat design, its decisions are subtle enough that, after sufficient analysis, much of Letterpress isn't flat at all.

How and why do people misinterpret non-flat design elements as flat design? The transitions could be too fast to notice. You might not care that a selected tile is floating above the rest, especially since that tile is hidden under your finger. Or, more likely, it could be that these are small details, lost in the overall approach of the whole. Letterpress shows that nothing is off the table as design approaches go, and others' conceptions of flat design shouldn't be a straitjacket for our own inventive solutions.

Gestural flatness: Clear

To-do list Clear began as an iOS app, and now it has a Mac version as well. It uses Helvetica only, as well as restrictive, consonant color palettes.

The iOS app is known not only for its design, but also for its novel, liberal use of gestures to control a to-do list. For example, swiping downward at varying degrees has varying effects: swipe a little and you'll create a new item, but swipe further and you'll be taken back to select another todo list. Pinching

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^{38.} Jeff Kibbule, Tweet on 24 Oct 2012. http://dsn.tc/04b-26.

between items creates a new item between them. Tapping at the bottom of the list creates a new item there.

Clear joins a number of other apps in its use of gestures that are relatively hidden from view. As Foursquare designer Timoni West mentions in an interview with this essay's author, this might not be a bad thing, as touch interfaces bring about entirely new ways of interacting with technology: 39

There is a whole class of gesture-based functionality, basically, that mobile apps are trying to take advantage of, which is fantastic. Now on Foursquare, when you pull down on a venue, it checks you in without you having to tap the screen. It's a power user feature we tell people about – it's very rare you accidentally do it. Plus, a little bit of a learning curve isn't that bad. A lot of web gurus say it's bad if there's any kind of learning curve or tutorial needed, but I disagree. We're making the standards. This is the time when we're figuring out what the best practice is.

Clear fits into broader notions of flat design, but its gestures are worth analyzing further. What is the relationship of gesture-based interaction models to flat design? It could be that, while functionally separate, they are growing with each other; flat designs happen to have adventurous interaction models more frequently than other apps. It could also be that, with a design aesthetic, so grows an *interactional approach*.

Personally, I'd love to see someone break down the aesthetic differences between modern apps, comparing them with their respective interaction models to determine whether you're more liable to get a far-flung gestural model for something that looks a certain way. But for the sake of this essay, I'll leave that as an exercise for the reader.

The current situation

Flat design appears "simpler" in that there's fewer visual elements to look at most of the time, but flat design *done well* has the deeper kind of simplicity that Jonathan Ive speaks of. People rightly pillory flat design for being too indistinctive and unremarkable, but the bigger quandary is in hewing too

38

^{39.} Patrick Sisson, "New Trends in Mobile Design", *Nothing Major*, 21 Mar 2013. http://dsn.tc/o4b-27. (This interview also contains quotes from this essay's author.)

closely to flat design's dogma, as $Wire frames\ Magazine\$ author Jakub Linowski notes: 40

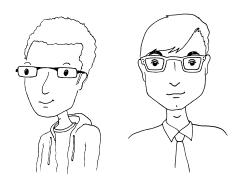
The fundamental thing about flat design is that it is a restrictive trend that ought to be questioned. Perhaps it's cheaper to develop, design or maintain, but if taken in its literal interpretation it could result in a lower quality user interface.

Flat design isn't always the best option, then—and it's clear that some of the best-executed flat designs don't completely hew to flat design's precepts. The best ones know where, when, and why to break the rules. Flat design succeeds when it's a natural result of the design process, not when a product is made to fit it. Flat design will fail if you create a style guide first and a product second; the design process must be closely mated with the product's direction.

If quality is the ultimate goal of the design process, it may be that we arrive at something entirely unlike flat design's current trends. Something graphically maximal, with numerous frills and a heavy-handed interface, may actually succeed if it fulfills the user's and product's goals in tandem. Perhaps flat design is a sensible direction for many future products, a natural consequence of developing clearer interfaces; perhaps it's more like a pendulum, and in ten years we might have the next iOS 6-era Game Center or Microsoft Bob.

^{40.} Jakub Linowski, "Calling Bull\$#!%: On Flat Design", Wireframes Magazine, 1 May 2013. http://dsn.tc/04b-28.

About the authors



Nick Disabato helps other people make *Distance*. He once made *Cadence* & *Slang*, a very small book about interaction design. An interaction designer by trade, he cares about the way that we talk with each other, and he wants to make our conversations more constructive and meaningful. He can usually be found on his bike somewhere in Chicago.

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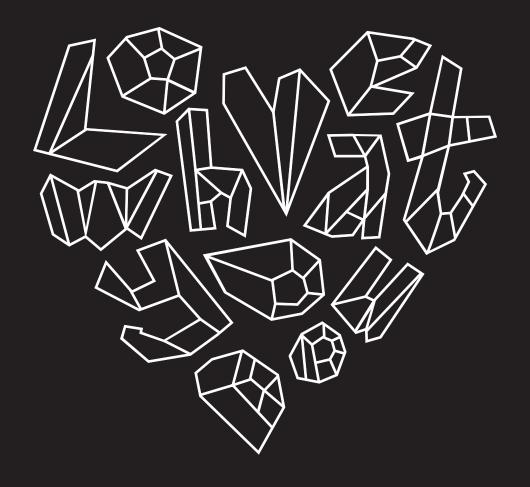
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