

Apples and Oranges: A New Trend in Personal Computing

by Thibault Dambrine

Introduction

Last year, a fateful event happened in my home office: the power supply unit on my venerable Windows PC literally exploded, shooting sparks, smoke and producing a loud bang in the process. Diagnostic: the power supply died, and with it the motherboard. Only the hard drive survived. I was lucky. That meant a brand new computer. In the end, I got a learning opportunity in the bargain.

To give this article some background, the Operating Systems I ran at home were Linux and Windows. After the incident, I promptly ordered a brand new Dell laptop online, loaded with goodies, a bit on the expensive side, but then I felt it was somewhat justifiable, since being aware of the latest and greatest is part of my job.

I placed my order with Dell on the Web in November 2009. In December, sometime after the expected delivery date, I called to inquire on the status of my order. Dell was struggling with parts. I cancelled and waited January to re-order. In February I received an e-mail message from Dell, they again could not make the date. I cancelled once more. I had ordered from Dell before so all this was a surprise. Maybe it was a sign.

At that point, I had lost any appetite to buy from Dell. But then what? HP? I took a look at their products in the local Best Buy, the stock of Windows Vista is not yet out, they looked OK but somewhat un-inspiring. After some thought, I figured "could it be time for an Apple?" In the end, I visited the local Apple Store and purchased a brand-new Mac.

This article will describe my first impressions running an Mac, the inevitable comparisons with Microsoft and Linux desktops, the hardware, the software and how I eventually pushed this machine to do more than what it was originally sold to do.

Part 1: First Impressions, First Surprises

I purchased a very good looking 27" all-in-the-screen design Mac. With this, I also got an extra 4 gb of memory just for goodness, and a new office suite to boot - since this is a Mac, I was advised to get iWork, Apple's Microsoft Office equivalent, and I was ready to go.



Apple picture material source: www.apple.com

Two surprises at purchase time:

- 1) Sticker shock! No wonder Apple stock is so high. Follow-up thought: maybe I should buy Apple stock (NASDAQ:AAPL) as well.
- 2) No numeric keypad on that keyboard? OK. I end up feeding Apple another 70 dollars for a full keyboard, starting to wonder what the hype is all about. Note, the numeric-keypad-less keyboard that did come with the machine is wireless.

On the positive side, Apple did have a system to sell to me. I did not have to wait, I just picked it up. No small detail, considering Dell's recent performance. I installed it at home, effortless.

Plug in the [purchased separately] wired full size Apple keyboard, started using the wireless Apple "magic mouse". The mouse has some definite aesthetic qualities, it is very pretty, but not quite my old school taste. I like a chunkier piece of equipment and ended up using a USB Microsoft mouse with two buttons rather than the Apple mouse. The Apple mouse has no roller, is sensitive to "swiping", which acts as a roller action. You can swipe one or two fingers, which is, I admit, a rather new and ingenious way of navigating. Here are some pictures from the Apple site just to give you an idea:

The Apple Magic Mouse movements:




The Magic Mouse Operations:

Movement	Explanation
Click	You can click and double-click anywhere on its Multi-Touch surface
Two-button click	This mouse functions as a two-button mouse when you enable Secondary Click in System Preferences. Left-handed users can reassign left and right click as well
360° scroll	Brush one finger along the Multi-Touch surface to scroll in any direction and to pan a full 360 degrees
Screen zoom	Hold down the Control key on your keyboard and scroll with one finger on mouse to enlarge items on your screen
Two-finger swipe	Using two fingers, swipe left and right along the Multi-Touch surface to advance through pages in Safari or browse photos in iPhoto

The Apple mouse, by the way, is not incompatible with my chunkier old-style mouse, I have the two on my desk now.

The Apple keyboard, even with the numeric keypad, has an allure all of its own. As with all things Apple, it is stylish, with square white keys contrasting starkly over a thin slab of aluminum. This keyboard is not wireless but it does provide not one but two USB extension ports on either sides. Nice touch. The keys are flat. Some technical reviewers describe them as "ultra flat" (how flat can you get?). Since my fingers are round, it did take some time to get used to. I touch-type and tend to pound the keyboard when at cruising speed. With this keyboard, one simply has to tone down the pounding. On the plus side, the Apple keyboard is very silent.

One more quirk worthy of mention: The Command key - the one with the  symbol on it, immediately left and right of the keyboard is special to Apple. In the Apple world, it is the equivalent of Windows's Control key. In the Windows/Linux world, I am a big consumer of Ctrl-C/Ctrl-X/Ctrl-V key combinations, as well as the Home and End keys. These keys behave differently on this keyboard. Very awkward to get used to.



The screen finally lights up. Ahhhhhhhhh!!!! The screen is **spec-ta-cu-lar**. The all-in-one design means that everything sits neatly on top of my desk, no big box anywhere to be seen on the side. The CD slot is on the right side, it gently accepts the disks fed inside. On this, one last surprise, again for Apple, the star of all things technical and multimedia: the Mac cannot read a BlueRay DVD disk. What a miss... Wondering how Apple can leave such a gaping hole, having such a good quality screen? Anyways, moving along... I don't watch that many movies on my PC, but I thought I would, could, who knows?

Speaking of movies, on my previous, now defunct PC, I had a TV receiver card. With that in mind, I bought an Apple package called eyeTV, which instead of a card, came with a very small USB plug that had a USB adapter at one end and a Coaxial cable TV adapter at the other. Worked like a charm, even if the TV picture resolution was rather fuzzier than the Hauppauge card I used in the past on Windows. After 3 days, it stopped working. I went to the Apple store, got it replaced. Again, 3 days later, it died. I returned it and abandoned the thought of watching TV on my Apple, as I did in the past with my PC.

So this is it. I am now a cool Mac user. Let's see what this beast can do, considering its cost, considering it cannot play TV or BlueRay DVDs and considering I have to get used to that keyboard, at least a bit. By the way, you may say these are minor gripes, but for one who spends long hours at a keyboard, finger comfort, mouse comfort and common key combinations such as Ctrl-C/Ctrl-V are major.

Part 2: OS and Software

A Windows or Linux guy must learn: MAC OS 101: MAC OS IS NOT LINUX or WINDOWS. They do look very similar, yes, but they are not the same. Let's talk about the look and feel.

The menu for any active window is at the very top left of the screen, not at the very top of the active window. I struggled for the first few minutes trying to figure that one out.

- 1) There is only one spot to re-size a window, it is at the bottom-right corner. Why did Apple skimp on such a simple ease-of-use feature?
- 2) Apple OS is supposed to be very stable. Well, so far so good. I had this system for about 6 months now and never a blue screen of death or any other colour for that matter. That appears to work.
- 3) The funky docking menu at the lower end of the screen is nice, but somewhat gimmicky. Personal opinion only. It works. No complaints.

On the plus side, the machine is built to "know what to do":


- Plug in the printer, it instantly recognizes it down to the brand name.
- Plug in a digital camera, there it is.
- The hardware comes with a good set of speakers, a good eye camera, a good microphone, all integrated.
- The machine is silent! No fan noise. It does get pretty warm at the top end after a few hours, but it works.

On the software side, here is a list of packages that I tried, in the order that I tried them:

Apple Software	Author's First Impressions
iWork Pages	As a writer, I had high expectations from this one. This is a BIG disappointment. This editor is just not up to current level of ease-of-use.
Numbers	Numbers is Apple's Excel equivalent, not bad but again, I did not spend a lot of time on it.
Keynote	Keynote, the Apple equivalent of PowerPoint. This one gets slightly better marks than Pages, but not by much.
Garage Band	Lets you learn a good number of popular songs and the instrumentation, well done.
iPhoto	Very slick, easy to use, face recognition very well done.
eyeTV	The software worked, even if in a mediocre way, the hardware failed two times after 3 days.
Safari Browser	I ended up downloading Firefox, which I find more intuitive, friendlier.
Mail	I did not try Apple's Mail package. Gmail does the job for me now.
Front Row	Front Row is one of these applications that remind you of why Apple is doing so well. It dims the screen gently, as in a movie theatre, and brings up the latest popular titles that one can get from iTunes. All on that big high resolution screen, it is all very tempting. No wonder the Blue Ray DVD players are not an option! Again, note to self: take a second look at Apple stock (NASDAQ:AAPL)!
iWeb	I expected an Apple equivalent of DreamWeaver for this one. No such luck. A good name for iWeb could be "Apple Secret Sauce for the Web". Just add a few of your own pictures and you can have a perfectly slick Apple style website... This is not a developer tool. I noticed as well a number of help pages that show reliability problems. Just Google "iweb does not open".

To supplement my appetite for things that work the way I like them to, I downloaded the following packages:

Open Source Software for Apple	Author's Comments
Open Office	From OpenOffice.org, this software just keeps getting better with every release. It is easy to use and it opens anything Microsoft Office Suite can throw at it - for free!
Gimp	This is the Open Source equivalent of Adobe Photoshop. It may not be quite as slick as Photoshop but it is very powerful for the price: \$0.00.
FileZilla	This is an Open Source FTP package. Well done, works well on every platform.
Skype	Skype is one of my favourites for keeping in touch, it is free and the Apple version works very well. I would say it is more stable on Apple than on my previous PC, taking advantage of Mac's built-in speakers, microphone and camera. Well done.
Firefox Browser	I find Firefox more intuitive, friendlier than Safari, the Apple built-in browser.
KeyRemap4MacBook	<p>This is a small but essential piece of software that enables one to re-map the Command key on the Apple keyboard. I tried DoubleKey, which was supposed to do that but it lost the settings after each re-boot.</p> <p>To anyone who has multiple OS on their Mac and are heavy Ctrl key users, I recommend this program. The net effect is that the keyboard, for the most part, behaves the same across all OS, Mac, Linux or Windows. It is free.</p>

Open Source Software for Apple	Author's Comments
Arcana Research's StartupSound.PrefPane	<p>One of the things that annoyed me a bit with my new Apple computer was the chime that it produced upon being booted up. Apple provides no control for this.</p> <p>Arcana Research's StartupSound.PrefPane is the answer if this is your question. A simple, free piece of software that mutes or at least gives control over the start-up chime. Way to go, Arcana!</p> 

On the software side, Apple has lived up to its image of singlehandedly redefining the “cool & slick” factor, especially for non-technical users. For pictures, movies, music, home applications, Apple just makes easy to use home software products. More than just a computer, this machine is truly built as a home entertainment delivery system. In Mac OS, part of this ease of use factor is simplicity. No control panel, no obscure drivers.

On the more serious side, against this ease-of-use backdrop, the Apple iWork suite is surprisingly un-intuitive. It looks like Apple did not expend the same amount of ease-of-use attention on their business side as they did for their other software offerings. Microsoft does offer Office 2003 on the Apple, but I was curious about Apple.

For business purposes, on Apple, your best bet is Open Office. It opens every type of Microsoft Suite document up to the latest release, and it does it with an interface very similar to Office 2003. Open Office is also free. By the way, Sun Microsystems, the people who brought you MySQL and Open Office, are now part of the Oracle family. Let's hope they don't let Open Office die as a non-strategic product, or start charging for it... Such thoughts did not come to mind until they started suing Google for using Java, another famous Sun open source product .

Last but not least in the impressions section, if you are so inclined, you can get to the command line if you type "man grep", a good old UNIX style man page will appear. Perl, Python, Shell Script run native. Try to do that in Windows... There is UNIX gold in them Apples!

Part 3: Beyond Mac OSX



"Dambrine notes that apples are more expensive than oranges, and oranges have some awesome applications that aren't really duplicated in the orchards of Apple. That said, apples are cool."

*W. Cooper
(comments from an informal pre-release proofread of this article)*

(picture credit: nextnature.net)

One of the pieces of software I use consistently is Adobe's (formerly Macromedia's) Dreamweaver WYSIWYG web editor. My version is a few years old, but so far, I have not found any equivalent either on the open source or the commercial market. I still have the disk and it runs on Windows, not Mac. What is a geek to do? I like that brand new Apple, but I still needed Windows.

There are at least two solutions to this question:

- 1) Apple's own "Boot Camp" partition, which allows Windows to run in a separate partition
- 2) Virtualization, which can be achieved by installing a separate software package.

For option two, the virtualization software is installed on the existing host OS (Mac OS X in this case). Within this application, additional "guest" operating systems can be loaded and run, each within their own virtual environment. For OS X, there are three major virtualization options on the market right now:

- 1) VMware Fusion, developed by VMware, allows Intel-based Macs to run x86 and x86-64 "guest" operating systems
- 2) Parallels Desktop for Mac, developed by Parallels, Inc, provides virtualization for Apple Macintosh computers with Intel Processors
- 3) VirtualBox or Oracle VM VirtualBox, originally developed by German software company Innotek. Innotek was purchased by Sun Microsystems, Oracle now owns Sun. VirtualBox is released as Open Source software and therefore is free of charge. It is the only one that does not recognize a previously installed Boot Camp partition. I have not heard bad things otherwise.

Within these three, Parallels and Fusion are the two heavyweight contenders for my attention. They are not free but they look like the better products at this point for my purpose.

The main difference between virtualization and Boot Camp is as follows: In all virtualization cases, several operating systems can run concurrently. In the case of Boot Camp, you have to hold the "Option" key, on the left side of the keyboard while booting, and then decide to either boot in Windows or Mac. You decide what the default should be. To switch OS, one needs to re-boot. In effect, Boot Camp works like a traditional partition dual boot.

Notes on Boot Camp:

- Boot Camp is free, but not necessarily straightforward to install (see Appendix). It seems Apple made it available grudgingly, as if Windows was an unwanted guest. Still, once properly installed, it works just fine.
- Both Fusion or Parallels can import a Boot Camp partition
- If you load Boot Camp first and then import the Boot Camp Windows partition in VMware, you have to re-register it with Microsoft – otherwise Windows thinks – when booted up in a virtual window – that it no longer is a legitimate copy.

Within all these options, I decided use Boot Camp first, with the aim to eventually virtualize my Apple and then have Mac, Windows and Linux running concurrently.

Part 4: Going Virtual!

Having Boot Camp well warmed up, I was ready for more. None of this having to re-boot every time the need came for a different operating system. The availability is there for under one hundred dollars, the two big virtualization competitors, Parallels and VMware, have free trial periods, there was no reason not to at least try.

From all the reviews I read, Parallels looked like the clear winner. I tried it first. While it did work, and recognized my Boot Camp partition, it felt somewhat awkward. I un-installed the trial version.

I subsequently installed a trial version of VMware Fusion. I found it to be more straight forward, [even if a tad slower according to all reviewers]. Everything runs in its own "window". There is a Windows "window" and a Linux "window" for the two supplementary OS that I have installed. Nothing is mixed. Turning off Windows or Linux in a virtual machine screen simply means that that "window" will go blank; it is virtually off. So far, I have installed successfully both Windows and Linux, ran them concurrently and they work very well.

I did experience one glitch on the Linux partition, in that the resolution of the Linux partition did not scale well when expanding the window that showed that partition. I found the resolution for this problem on the Internet at <http://communities.vmware.com/thread/293266>. It turned out to be simple: In the Linux terminal, enter the following commands:

```
sudo apt-get remove xserver-xorg-video-vmware
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Followed by

```
sudo apt-get install xserver-xorg-video-vmware
```

Then log out and log back in again.

Conclusions, Closing Comments

So, the question remains: Apple or Windows 7? Which is better? Is it worth spending the money for a Mac? Would I do it again? On the "which one is better" question, I would compare this question to another similar inquiry: something like: "Is a BMW 3 XDrive Series much better than a Honda Accord?"

<p>The BMW 3 XDrive</p> <ul style="list-style-type: none">• is equipped with a 265 bhp straight 6 with four wheel drive• has leather seats• costs [at least!] 30% more than the Honda• carries "a certain amount of" prestige• is somewhat exclusive	<p>The Honda</p> <ul style="list-style-type: none">• is equipped with a 271 bhp V6 with front wheel drive• has leather seats• costs 30% less than the BMW• carries "not much if any" prestige• is somewhat common
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As for the BMW 3 XDrive vs. Honda Accord, an Apple Mac vs. a simple Intel box with Windows 7, they both do much the same things, only one has a whole lot more style and flair than the other – and costs significantly more.

Is style, ease-of-use and a reliable product important to you? Go for the Apple.

Is your computer more akin to a pickup truck, a minivan or a utility vehicle? Go for a regular PC, beef it up with some extra memory, a good video card, an extra large high-definition monitor (which can also act as a television), you will achieve much the same results at a fraction of the cost.

Are you a bit of a mechanic? You can purchase the Apple OSX for roughly \$35.00 at an Apple Store and shoe-horn it on a number of regular Intel boxes. I have personally seen it run on [former] Dell computers and laptops as

well, but not all hardware is compatible. Apple likes their OS to run on Apple Hardware. For more information on this, plug in "hack OSX" in any search engine. Anyone who is well versed in UNIX technologies will also appreciate Apple's MAC OSX solid - you guessed it - UNIX foundation.

Much as I suspect one would when buying any luxury car, with my Apple purchase, I feel like I indulged. I had fun. It was interesting to see what all the buzz is all about. I hope that in the long run, my Apple purchase will live up to expectation, but for now, I very much enjoy the power of running not only Mac, but Linux and Windows as well, concurrently on the same screen.

On virtualization vs. Boot Camp, if I had to do it again, I would skip the Boot Camp step and go straight to installing VMware and loading the other OS. Boot Camp is free of charge but it is labour intensive to install.

As I purchased my Mac machine, my original plan was to use it with Boot Camp to house Windows as well. Somewhat versatile, but not stupendous. The virtualized Mac turned out to be above and beyond original expectations. Ironically, the features that have made this machine a great one for me came in as non-Apple add-ons - thanks to virtualization and the ability to concurrently run Mac OS, Microsoft Windows and Linux. Next step: explore Google's Chrome OS!

In closing, I am not the first one to use automotive comparisons in this topic. My friend JD, another early reviewer, says I should not compare a Ferrari [Mac] with a Ford F-150 pickup truck [Windows PC]. In an [AppleInsider](#) article, [Microsoft CEO hopes to reenter phone market, disputes PC shift](#), Steve Jobs compares the PC to a "farm truck". Steve Ballmer calls the Mac a "Mack Truck". With virtualization, this debate is no longer necessary. It is possible to have more than one vehicle in the garage. Admittedly, I am an accidental adopter, but the way I see it, "Apples and oranges" are just the beginning. The trend for OS co-existence is just revving up.

Forrester Consulting, a services arm of Forrester Research — March 22, 2010 — Released a study today that finds virtualized IT environments continuing to expand. Despite an explosion in complexity, the study also finds that virtualization has improved service quality, operational staff productivity and morale. The study was commissioned by IT management software provider CA.

Gartner Research — April 2, 2008 — Virtualization will be the highest-impact trend changing infrastructure and operations through 2012. As a result, virtualization is creating a new wave of competition among infrastructure vendors that will result in considerable market disruption and consolidation over the next few years.

Appendix: Boot Camp 101

Before installing Windows on a Boot Camp partition on your Apple, I strongly suggest that you would have another computer handy, one that can deliver Google and/or Youtube content. There are lots of examples on Youtube in particular and I found them very useful when installing the video drivers on my Boot Camp partition.

Find Boot Camp Assistant in the Utilities folder, within the Applications folder- A window will pop up and explain what Boot Camp does. You can also print the installation guide - do that. It is useful.

- In the next step, Boot Camp will ask you to partition your disk. You will have to decide how much space to allocate to Windows, out of your total available disk space. This process may take 10-15 minutes.
- Once that is done, insert your Windows 7 DVD disk and click "Start Installation"
- The machine will load Windows, stop and re-start. Don't touch it. During this process, the machine may stop and re-start several times.
 - Eventually, Windows will ask you to record your operating preferences (language, time format, keyboard)
 - You will then get an "Install Now" button. Click it!
- Accept Microsoft License
 - The "Which Type of Installation" screen will then appear. It can be either an "upgrade" or a "Custom (advanced)" -> Click on Custom (advanced)
 - On the "Where do you want to install Windows" screen, click on the Boot Camp partition and click "Drive Options (advanced)" text, below the partition selection, on the same screen (bottom right)
 - Click the "Format" button to make an NTFS formatted partition. You will get a window saying "The

partition might contain recovery files, system files or important software from your computer manufacturer. If you format this partition, any data stored on it will be lost." - This should be a new partition, carved out of unused disk space, so click OK, you are not about to lose anything.

◦ After that, the screen will come back to the partition selection. Click Next.

- The actual Windows installation will start now. The computer may re-start several times. This process may take 25-30 minutes.
- After the restart, Windows may ask you to hit any key to boot from the DVD. DO NOT PRESS ANY KEY.
- Windows will ask you the serial number on the box, as well as setup the account, password, network etc.
- Be sure to download the available updates from Microsoft - guaranteed, there will be some.
- Eject the Microsoft Windows disk

Driver updates for the Boot Camp Partition: Make sure you have the OSX disk handy

<http://www.youtube.com/watch?v=rXhUsimtmN4&NR=1>

Full install video example

<http://www.youtube.com/watch?v=DaqKi8myrl0>

If left as is, the Mac will boot in Mac mode, naturally. To get it to boot in Windows, press the Option key while the machine is powering up, you will get a choice then of booting in either Mac or in Windows.