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# MONEY

The branding of a country through the design of its currency

Richard Zeid

THIS NOTE IS LEGAL TENDER  
FOR ALL DEBTS, PUBLIC AND PRIVATE

*Rosario Marin*

Treasurer of the United States.

F<sub>3</sub>

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JACKSON

JW



## **ABSTRACT**

People covet it. Countries fight over it. People have dedicated their lives to the control of it. They will even kill for it. Always wanting more, never having enough. It really is not that special. It represents a common article for bartering, a medium for exchange. A mere piece of paper measuring approximately six by two and a half inches, printed on both sides. They say it is the root of all evil, this small and rather unimpressive piece of paper, but for hundreds if not thousands of years, in every country around the world, it represents national pride, historic figures and events as diverse as the pieces of paper themselves. It is money.

What makes a simple piece of paper so important to so many individuals is what will be explored in this paper. Slowly peeling back the layers that go into the creation, production and security of these documents, I discovered common themes and best practices. Each with their own distinct styles, more countries share concepts than don't.

As many successful businesses know, effective branding and implementation of their brand is key to their success. All countries have a brand. People within and outside of the country have an idea in their minds of what the country represents. In the United States you can find this information outlined succinctly in our Constitution.

It is important to also be aware of the history of paper currency - to understand where it came from, why it was needed, and how it was used as a communication

tool. Great stories and statements have been made on early currencies, many of these stories remain on notes throughout the world.

From color-shifting inks to microprinting, printing currency is a highly sophisticated process. It is more than just laying ink down on paper. Many modern techniques are pushed to their limits to insure that currency has a unique look and feel as compared to any other printed document. Even the traditional papermaking processes are tested when producing the new media for currency.

A very common element that currencies throughout the world share is the protection of their currency from counterfeiters. Many of the processes, design choices, and methods have all been fine tuned and altered to ensure that the document is nearly impossible to easily duplicate. The United States Treasury sums it up quite succinctly with their motto “Safer. Smarter. More Secure.”

Qualitative research used books, various articles, and websites for branding, history, production, printing, and counterfeiting topics. Quantitative research, in the form of actual collected currencies, lead to the overall design survey. Together the research was used to discover the mysteries behind and within currency. The results of this research shines the light on a subject often taken for granted. In the end, an understanding of building a better, perhaps more secure, note will be uncovered.



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## **INTRODUCTION**

I remember my first trip to a place outside of the United States. The oddest part of the journey was that there was no physical travel done. No airplane, train, bus or other vehicle was involved. I did not have to worry about time changes, lost baggage nor jet lag. It was a wonderful trip for a young boy who never went further than his own neighborhood.

My father is from Canada. Much of his family remained in this foreign place, at least, foreign to me. They came for a visit around the time of my birthday. Many brought gifts, which was very kind, but nothing I have not received before. One uncle gave a gift that brought me to another place. In a card simply signed, "Love, Uncle Sol," were these strange pieces of paper printed in bright colors with strange faces, odd buildings, and a queen, which I thought only existed in fairy tales and history books. It was a new world brought to me, telling me about a place I have never seen.

Like the money I had in my own pocket, I am sure those who saw it and used it on a daily basis never really gave it much thought, but I was fascinated. Anytime I knew of someone going someplace else I needed to see the money. Those little slips of paper were my own special travel log. From looking at these places pictured, I knew something about that country: what the people looked like, and what they thought was beautiful, even the places they revered. Their currency had unusual aspects to them as well, but so did ours in the United States. When is the last time you saw a pyramid in this country? Yet there it was proudly displayed on our own

currency. The meaning is unknown but it looked very regal and important.

Currencies say so much more about their country of origin than just the monetary association and buying a loaf of bread. Choices have been made about the images that are illustrated. The people who are shown speak to those national values the country respects. The motifs are as varied as something I cannot express as of yet and create a rich visual document. But when all is said and done, and the right images are chosen, what does that picture say about the country from which it comes? Does it give someone not from that country an accurate picture and idea of that country? Is it an amazing public relations tool that communicates some image agenda that might not speak for the citizenry? It is these questions and so many more that makes currency such an exciting part of the fabric of a country's identity. Taking a little bit of that country home with you after a visit helps you remember the experience you had there - the beauty of the people and the sites. Their artwork and culture are quickly expressed in a typically innocuous piece of printed matter.

Europe, seen as the cultural birthplace of the modern world, is as diverse as any continent can be. Many of the great artists came from Europe, and their art alone could often tell you what country they called home. From the Scandinavian peninsula to the landlocked country of Switzerland, each country creates currency for use in their country, unique to each country. Only recently has the European Union began to homogenize the currency and implement what is now known world over as the Euro. Currently, twelve countries use the Euro.

The far-reaching impact that money has on one's society and cultural fabric is astounding. Singers have sung about both its virtues and demons. Writers have written tomes of its achievements. Artists have expressed their views using it. Countries have waged great and devastating wars over its political ramifications. Movies have celebrated it. It is a part of one's national identity.

But behind it all still remains a six-by-two inch piece of paper printed on two sides in a rather dark and unimpressive green ink. Why are so many diverse people all wanting this mystical piece of paper? What does it really represent and say that so many people want to associate with it? What do these small pieces of fine cotton paper folded into our pockets mean beyond their face value?

\$0.03

In America, money has been at the heart of the American experience. It has funded great invention and ingenuity. Paper money itself is a classic example of American ingenuity.<sup>1</sup> Even its disregard of authority, the Boston Tea Party, has tradition. The dollar throughout its history has existed as an art form, a kind of advertising, and a builder of power. It has moved our country alone from thirteen small colonies west across the frontier and the plains, building cities and spawning opportunity. It is indeed part of the American brand.

Countries outside of our borders also have their own brand. Ask people in the states and you will hear all sorts of comments about foreign countries, typically not flattering

or representative of the national brand of the country. Poland's people are often the brunt of jokes against their intelligence. The Scots are cheap and frugal. The French hate Americans, although one of our most treasured symbols, the Statue Of Liberty, was a gift from them. Italians are seen as macho lotharios. Asian countries are seen as mathematical and technological wizards. Africa and other third world nations are seen as vast wildlands of herds of wild animals and not much else.

But they, too, have designed and redesigned their currencies to not address such issues but to celebrate in their unique cultures, national heroes, and contributions to the world as a whole. Their designs, heavy with color, different imagery and odd language, often seem to be highly abstract against our very formal looking currencies. Even young children do not recognize foreign currencies as legal tender but play money, much due to its appearance and their experience. But currencies of all countries are as different as the countries themselves.

How does a country design a piece of paper that protects itself from the criminal element *and* says something about who they are? A balance needs to be struck, a balance between the imagery seen and the technique of the process of actually making currency. Of course, the process starts with the design. What is the country? How do they want to be seen to their citizens as well as their visitors? Where do they position themselves in the global arena? Essentially it all starts with their brand.

## **BRANDING**

Since the beginning of time, when man was communicating with drawings on cave walls, the need to communicate grew from a simple set of universal questions. Who am I? Who do I need to communicate with? Why do they need to know me? How will they find out? How do I want them to respond to me? Individuals, communities, organization and even countries all express their individual personalities through their identity.

Man has always used symbols to express his uniqueness, pride, loyalty, and ownership.<sup>1</sup> The power of symbols is immeasurable, and can instantly trigger an image or emotion, be it sewn into a flag or etched in stone. The power of symbols now and in the future is strong. Countries have always been in a competitive fight for recognition, apparent in their banners on the battlefield and family crests. What was once heraldry is now known as branding.<sup>2</sup>

A brand is a simple idea that lasts a long time. Brands are not just a tag on the back of someone's pants, or a logo on someone's computer. It goes beyond the kind of coffee you drink. Brands are more than just logos. Logos, a part of corporate, sender-oriented communications strategies, make up only a piece of a brand. They are part of a sender-oriented communications strategy. A brand, simply put, is part of a user-centered identity. And that is where currency lies, in the hands of the users. How do people perceive money? What does it mean to them?

A brand is a set of ideas that occupies space - not on a shelf, but in one's mind.  
Those ideas and what they represent give the items they are attached to their value.

Brands are holistic. They are not individual elements, but parts of a whole.  
Brands are a creation and maintenance of a promise to the public, the soul of the endeavor. They are a collection and balance of corporate identity and reputation, product/service functionality, character equals value proposition, and, lastly, and maybe most importantly, the user response and interaction.

A brand must be built from the inside out. The product is the critical ingredient. Being tangible and something the user can relate to is crucial to its success. Of course with currency, a person will use the product regardless of their relationship with it. People must use money as a basic tool for survival, regardless of what it looks like or how it works. However, how they feel about it could be affected by their visual relationship with it. If it looks like Monopoly/play money, the attitude is clearly different than if the document demands respect and reverence.

A brand holds no value that occupies no mental space in any customer's mind.  
Mind share and recognition through exposure alone cannot create a brand. The user constructs the brand through their response and interaction when they interpret the product and engage with it.

Brands are built over time. Identification, consistency, quality, and familiarity are all key characteristics which lead to a successful brand, be it Corn Flakes, Catholicism, or the United States.

Our country's brand is outlined in our Constitution, our written set of beliefs. We believe in freedom, self expression, being individuals, and being free from oppressive governing. Everything we hold true to being an American is clearly outlined in our Constitution setting us apart from all other countries. Our set of written values is so strong that people from all over the world believe many of them and look at America as their home too. As times change, so does our Constitution. Amendments keep our beliefs current and take into account the changes in our American experience.

**\$0.07**

As our currency began as a collection of promissory notes, allegories and story telling documents, it has often changed in look as well as to reflect those changes. Since the late 1920's, our currency - the images you see, the faces looking back at you, stopped evolving. Women have been given equal rights as men and hold many prominent positions in our country's government, yet they are still not represented. The country has grown exponentially due to our American dream and our welcoming Statue of Liberty, and yet not a single non-white face is seen staring back from your wallet. In more recent times, when nations undergo political change, it is often reflected in the images on their currency, while maintaining icons on a nation's banknote can signify stability.

## **HISTORY OF CURRENCY AMERICAN STYLE**

Let's go back to when America was yet to be discovered and to the words that began the discovery of a new world. "Oh, most excellent gold!" declared Christopher Columbus, "Who has gold has a treasure [that] even helps souls to paradise."<sup>1</sup> And with those words, Queen Isabelle and King Ferdinand sent Columbus off to the New World. It was money that not only funded the trip, but was the motivation to expand a country's wealth and power. The pilgrims, escaping religious persecution, soon followed, landing on Plymouth Rock. Precious metals, sea shells and tea leaves all served as early currencies throughout the world.

But the local Indians of the New World had their own monetary systems.

Ceremonies called potlatch were a form of barter. Potlatch comes from a Chinook Indian custom of a ceremony where gifts were exchanged, feasts were eaten, and dances and various public rituals were performed.<sup>2</sup> These ceremonies often grew to elaborate ceremonies, since the exchange of gifts from one tribe to another also had close ties to the social rank of a tribe and its leader. They became social events to outdo one another's tribe. Soon, potlatch was outlawed in tribes in Canada.

This form of barter, however, was not unique to North America and the tribes around the original thirteen colonies. In Mexico, the Aztecs and Mayan cultures had a consistent monetary form. Gold dust kept in transparent quills and cocoa beans kept for larger payments were kept in sacks of 24,000 and used as currency.<sup>3</sup>



Native Americans had their own version made out of clam shells called it wampum. A primitive form of money, wampum came to be used extensively for trade by the colonists as well as the natives. Although made of shells from the sea, wampum was hardly confined to coastal tribes and was used extensively inland. The Iroquois amassed a massive quantity by way of tribute. As with the potlatch, wampum was desirable for its value as ornamentation and ceremony. Short lengths of eighteen inches were kept for daily, or more common use, while lengths as great as six feet were used for much larger purposes.

In 1664, Stuyvesant arranged a loan worth over 5,000 guilders for wages for workers constructing the New York citadel.<sup>4</sup> And as we all know, Long Island, too was purchased with wampum. Wampum, however, fell victim to inflation. The Narragansett specialized in the manufacturing of wampum by drilling holes in the shells and stringing them together. But that skill was made out of date when the spread of industry, and in this case steel drill bits, enabled unskilled workers and colonists to increase the supply of wampum a hundredfold, thus driving down its value. In 1760, J.W. Campbell started a factory for drilling and assembling wampum in New Jersey and continued production for a hundred years. Imagine what would happen to the value of a dollar if we could print our own money!

It was not too long before the American colonies started to produce their own forms of money, something that was uniquely theirs. In 1775, North Carolina had as many

as seventeen forms of currency that were all declared legal tender.<sup>5</sup> It should also be known that each of these varying forms had a common accounting basis in the pound, shilling and pence, something brought with them from the imperial system left behind in England. These various forms of currency fell into five groups: traditional native currencies including pelts and wampum, needed for frontier trading with native peoples; country pay or country money such as tobacco, rice, indigo, maize, wheat and other “cash crops”; unofficial coinage primarily from Spanish and Portuguese descent; some British coinage, although it was scarce; and finally, the birth of paper currency.

The first of these paper currencies were made by the Massachusetts Bay Company. These notes, more like bills of credit, were issued to pay soldiers returning from expedition. The notes promised to be redeemed for gold or silver, and were in turn used to pay taxes as legal tender. The example in Massachusetts was quickly followed by other colonies.

Another form of early paper money used through North America was “tobacco notes.” They, too, were certificates accounting for the quality and quantity of tobacco deposited into a public warehouse. As tobacco was actually used earlier, these notes were found to be more convenient than the actual leaf. Tobacco notes were recognized as legal tender in Virginia in 1727 and were a regular form of currency through the eighteenth century.

Public banks, in addition to State issues, began issuing loans in the form of paper money. This paper money was secured by mortgages on their property rather than a promise of future commodities. The term “bank” at this point was not as we know it today, but rather a collection of bills of credit issued for a temporary period of time. They were loan papers. If these were successful, reissues of these collected bills would lead to a permanent institution or bank in the more modern sense of the word. The Pennsylvania Land Bank was one of the best examples and authorized a series of three notes between 1723 and 1729.<sup>6</sup> The bank was such a success that Benjamin Franklin published a document called *Modest Enquiry into the Nature and Necessity of a Paper Currency*. His advocacy lead Franklin to receiving a contract to print the bank’s third issue of notes. Franklin, being the innovator that he was, seized the opportunity and became one of the first designers of currency, including imagery and symbolism in his printed notes.

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Prior to Franklin, most notes were little more than a formally written legal looking document. But Franklin took the opportunity to treat his notes as allegories. He told stories of the times, communicating the mood of this new country and the relationship they had with England. One of his first notes that Franklin created was called a “Continental.”

The story of this Continental (figure 1), as described in a Pennsylvania newspaper by

Franklin, speaks directly to the relationship of the colonies and England.

“We have a thorny bush, which a hand seems attempting to eradicate. The hand appears to bleed, as pricked by spines. The motto is SUSTINE VEL ABSTINE; which may be rendered Bear with me, or let me alone; or thus Either support or leave me. The bush I suppose to mean America, the bleeding hand Britain. Would to G-d that bleeding were stopt, the wounds of that hand healed, and its future operations directed by wisdom and equity; so shall the hawthorn flourish, and form a hedge around it, annoying with her thorns only its invading enemies.”<sup>7</sup>



figure 1  
The Continental note designed by Benjamin Franklin tells the story of the new country's desire for independence from England.

The allegories and history continue with pieces of currency showing more metaphoric images of the mood in the new country fighting against England up to, through and after the American Revolution. A \$30 dollar bill (figure 2) shows two scenes with a nautical metaphor, probably speaking to the journey to the new world. The scene on the left shows a great wind stirring up the sea with the words VI CONCITATE, “It assaults with a violent force.” The scene on the right has a more optimistic view, with the sun shining down on calmer seas and the motto, CESANTE VENTO CONQUIESCEMUS, “When the wind subsides, we shall rest.”



figure 2  
An early note illustrating the journey to the new world both good and bad, the stormy seas of the trip and the optimistic future of the new country.

Two more examples (figures 3 and 4) show life around the Revolution. The colonies had taken quite a financial toll, and the imagery on the currency showed just how life had changed. The \$2 note shows grain being thrashed by hand with a flail. The

motto says TRIBULATO DITAT or “It is enriched by affliction.” The \$6 note from around 1775 shows a beaver gnawing at a tree with the words PRESERVADO or “By perseverance.” Both are rather telling tales of the times in the yet-to-be-formed new country. Through the Revolution and thereafter the newly formed United States decided to get out of the paper money business. The debt from the war had been dreadful. But all that changed around 1820, when the new country was ready to grow, ready to show that they would flourish, and develop as any country would given its independence.

America was stimulated with new projects to develop all the land beyond the eastern mountains. Projects involving moving people to the new areas included canals, toll roads, railroads, and bridges, and companies that were involved in these endeavors issued currencies to fund the projects.

The imagery seen in these notes seemed incongruous to the project funded. They were fetching, seductively-clad figures, and cherubs. Allegorical figures were commonly found on notes of this period and embodied the romantic spirit and energy burgeoning at the time. Our American eagle was found enveloping Liberty (figure 5) acting as a perfect metaphor for the American fondness for freedom. Many of the banknotes had this early pin-up quality.

And so began the image and branding of the new country, The United States of



figure 3

Daily chores in the new colonies were often shown on early currencies as this shows the thrashing of wheat.



figure 4

A beaver gnawing at a tree metaphorically shows the struggles of daily life and “perseverance.”



figure 5

This note from the Mechanics Bank helped fund construction projects and had a romantic spirit and energy of the new country.

America. A brand no longer reported the mood of the times, but represented a new attitude, a future, and plans for growth, along with an image that could start taking root in the citizens minds that gave them an image of pride, development, opportunity, and independence.

Many icons, as well as portraiture, appear on our currency. The most recognizable and the one that most people recall is the pyramid with the eye found on the back of the one dollar note. The roots of this graphic can be traced back to a \$50 continental (figure 6 and 7) dating back to September 1778. The thirteen steps in the pyramid are said to represent the original thirteen colonies. The eye hovering ominously above the pyramid is said to be the eye of G-d. But perhaps a truer meaning is that it is the eye of the people watching over the new colonies. Some also see the eye as a Masonic symbol that represents “The Great Architect of the Universe.”<sup>8</sup>

JSG Boggs, an artist who uses self designed currency as his subject, sees all these portraits and icons as relics of a country’s past. He creates “new” currencies in his art and finds the selection of people, places and icons as a more contemporary media, nearly going back to early currency designs which told stories. He uses modern day icons and lesser known, but equally important, people in his designs. Boggs sees money as a symbol for something else, public art.

One of Boggs’s most famous designs shows Harriet Tubman. When asked why he



figure 6 and figure 7  
The earliest image (figure 6) of the mysterious pyramid is illustrated on this note dating to 1778. It has remained a part of the iconography still seen on today’s notes (figure 7).



chose her image he says, "I think she fits all the criteria for who we (America) should have on our money. She was a great American who risked her life for right in the face of adversity. That is everything we worship as Americans."<sup>9</sup>

But simply redesigning a currency does not make it money. That is, once again, where Boggs goes back to the early roots of barter. For his work to truly be seen as currency, of having value, he must be able to appropriate something in exchange. To do so he barter for goods and services to complete a contractual transaction, and thus, turning his art into currency.

## WORDS ON PAPER

### E Pluribus Unum

The words found on our American currency are almost as enigmatic as the images. The words *E Pluribus Unum* (figure 8), are found on the ribbon streaming from the eagle's beak on the seal of the United States. They simply mean "Out of Many One,"<sup>1</sup> lending further to it's cryptic meaning.

The words themselves were supplied by Pierre Eugène Du Simitière. He was an eccentric antiquarian from Switzerland and became the principal patron of the American Museum in Philadelphia. This motto seemed to fit the desires of the newly formed country of thirteen colonies: Out of Many (thirteen colonies), One (a new country, a new beginning, a new independence). It was later found out that these words appeared in a London monthly magazine called *Gentleman's Magazine* in 1731. This only confirmed Du Simitière's eccentricity. If *Gentleman's Magazine* has a familiar ring to it, that would be due to its own evolution. In the 1980's, the magazine updated its own image and came back in its new form as *GQ*.

As discussed earlier, a large part of a country's identity are the historic documents that their government rules by and their citizens live by. These words resonate with their citizens and often lend themselves to the ideal of what their country is all about. In America, we have great documents and icons that do just that. Everyone can recite a part of our Constitution, the plaque on the Statue of Liberty, even the



figure 8

The words E Pluribus Unum supplied by Pierre Eugène Du Simitière as seen in the official seal of the United States of America.



Declaration of Independence. These words even reach beyond our country and into the global community. Everybody wants a piece of the American Dream, that which is outlined in our great documents.

Prior to the redesign of the American currency, ID magazine asked several designers what they would do if given the opportunity to create the new notes. The designers Jennifer Sterling and Eric La Brecque from San Francisco worked with literary themes. In their design, they said it makes sense to move away from the cult of presidents and move towards the cult of texts (figure 9).<sup>6</sup> They also explored the use of color to differentiate denominations and a braille element.



figure 9  
A twenty dollar note designed by Jennifer Sterling and Eric La Brecque explores the use of text and not image on currency.

## **Denominations**

The one element, no matter the country, language spoken or written, cultural differences or economic level, is that the denominations on all these varied currencies are always in American numerals. Numbers seem to be a universal language and clearly an indicator that all countries can differentiate. Perhaps this is what needs to be seen and most clearly illustrated.

The metric system, used internationally except for the United States, is not used on currency. Rather the very American numbering system, base ten, is. Italy's currency, which has note denominations in the thousand range, use typical American numbering of 1000, 5000, and 10000, opting to omit the commas used stateside.

## **In God We Trust**

“In God We Trust” brings about questions of the separation of church and state, a tenet we hold dear. How is it that on our own American currency we can contain such a bold religious declaration?

The use of the national motto on both U.S. coins and currency notes is required by two statutes, 31 U.S.C. 5112(d) (1) and 5114(b). The motto was not adopted for use on U.S. paper currency until 1957. It first appeared on the 1935G Series \$1 Silver Certificate, but didn't appear on U.S. Federal Reserve Notes until the Series 1963 currency. The use of the national motto has been challenged in court many times over the years that it has been in use, and has been consistently upheld by the various courts of this country, including the U.S. Supreme Court as recently as 1977.

\$0.18

The Department of the Treasury and the Department of Justice intend to actively defend against challenges to the use of the national motto. In 1992, a challenge was filed and successfully defeated in the U.S. District Court for the District of Maryland.

## **\$**

The most obvious of all words found on American currency is not really a word at all but a symbol, the dollar sign, \$. Where did it come from? The unique form that the dollar represents is truly a mystery. Whereas the euro symbol comes directly from the

Greek symbol for the letter “e”, and the Y clearly stands for yen, F is evidently for franc. Even the £ for the British pound, as elaborate as it at first may seem, is still only a stylized L which comes from the Latin word “libro” which means pound.

The origin of the "\$" sign does not have a clear and obvious evolution. What can be accounted for has often been challenged. The most widely accepted explanation is that it is the result of the evolution of the Mexican or Spanish "P's" for pesos, piastres, or pieces of eight (figure10).<sup>2</sup> Many of these currencies were used within the new country and were familiar. The development of the symbol comes from the review of several old manuscripts and explains that the letter "S," gradually came to be written over the "P," developing a close equivalent to the "\$" mark. It was widely used before the adoption of the United States dollar in 1785.



figure 10

The development of the dollar sign can best be traced back to the abbreviation of peso, PS, and the eventual overlapping of the characters into a new symbol as documented in old manuscripts.

## **THE EURO**

### **History**

Across the Atlantic, the euro is changing the face of not a single country, but currently that of twelve countries that have adopted the new monetary system. One single monetary unit that represents twelve countries. Where is the unique appeal for each participating country? How does a country within the greater continent stand out with its own personality? France is clearly not the same country as the Netherlands, nor do they truly share a common history or vision.

What we now know as the euro, has actually been years in the making. It all started with The Treaty of Rome (1957) that declared a common European market as a European objective with the aim of increasing economic prosperity and contributing to "an ever closer union among the peoples of Europe". Almost thirty years later, The Single European Act (1986) and the Treaty on European Union (1992) have built on The Treaty of Rome, introducing the Economic and Monetary Union (EMU) and laying the foundations for a single currency.

The most recent development that finally paved the way for the euro came in January 1999, when the exchange rates of the participating currencies were irrevocably set. Euro area Member States began implementing a common monetary policy. The euro was introduced as a legal currency and the eleven currencies of the participating Member States: Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, The

Netherlands, Austria, Portugal, and Finland, became subdivisions of the euro.<sup>1</sup> Greece joined in January 2001, and the 12 Member States introduced the new euro banknotes and coins at the beginning of 2002.

Denmark, Sweden and the United Kingdom are members of the European Union but are not currently participating in the single currency. Denmark is a member of the Exchange Rate Mechanism II (ERM II), which means that the Danish krone is linked to the euro, although the exchange rate is not fixed, it became a subdivision of the euro.

### **The Competition**

Aware that the appearance of Europe's single currency would play a role in establishing public confidence, national pride, even a sense of ownership in both the political and economic idea of a unified Europe, the European Monetary Institute held an official design competition between February and September 1996. In addition to a few practical restrictions, competitors were prohibited from entering images that could be associated with any particular country for fear of evoking bitter infighting and national rivalry. Images such as the Eiffel Tower, the Leaning Tower of Pisa, Beethoven, Bach, or Caravaggio were all forbidden.

Robert Kalina embraced the challenge. Armed with his Apple computer, Kalina began the process of making money. Kalina by trade is a diagram designer, so he was no stranger to technology and its power to aid design. Kalina was a student at the

University of Graphic Arts in Vienna in 1975, so his background as a graphic designer suited him well for the task at hand, communicating to a large audience through print media. He currently works at the Austrian Central Bank where he designed the currency of Austria. When the call went out for the designers to apply and submit designs for the new currency, Kalina was more than qualified for the challenge.

As with all creative projects, there was an overall outline or brief for the project. The theme of “epochs and styles of Europe” was given along with a color palette. Designs based on people closely attached to a country, like composers and artists, were prohibited. Seven notes were to be designed, 5, 10, 20, 50, 100, 200, and 500, and each needed to have a distinct look. Having people and landmarks removed from being used made it a daunting task to design a new bill. It is those elements that dominate currency from Korea to Belgium.

This led Kalina to the library to find suitable imagery. While knowing the tradition of having a portrait on currency, Kalina knew that an anonymous face would not make much sense. He went back to the epochs and styles of Europe. He then thought of a window. A window he felt had the right tone of openness and cooperation for the European Union. Along with windows came the other symbols of bridges and gates. All these images conveyed the image of moving from one place to the next, passing through and moving ahead, all that he felt the new currency should represent.

He worked exclusively with the tools which he was most familiar – and oddly enough what most counterfeiters use too – his Macintosh computer. He scanned many images which gave him the flexibility to work quickly. “To work on a Mac is uncomplicated. It is fast and the results are immediate. Working by hand can take weeks,” Kalina said.<sup>1</sup> This was an important visual appeal to what Kalina created. The new currency was to be used by a huge audience and needed to look accessible for the user and to represent the new tone of the currency. A formal engraving could look like much of the old currency with formal portraits or renderings of the structures Kalina was using.

Using the speed of the computer also allowed Kalina to fully elaborate his concept in four series of notes within seven months. In the end he submitted two of his series for consideration. He says the final expression came directly from his computer.

The true test of all the submitted designs came from an extensive user group, nearly 2,000 people. In order to ensure the public’s use of the new currency, the designs were brought to the public who most commonly come into contact with high volumes of cash: taxi drivers, bank cashiers, and retailers, as well as an official review panel composed of artists, marketers, and monetary specialists. To Kalina’s astonishment, his designs tested remarkably well and remained in contention. “I thought I would not have a chance because of my decision to do without portraits,”<sup>3</sup> Kalina said. It was indeed risky, but a risk worth taking for the new face (or lack

thereof) of the European Union.

Consistent with competition requirements, each of the seven predetermined banknotes reflect a specific period of European history: Classical, Romanesque, Gothic, Renaissance, Baroque, the age of iron and glass, and Modern. As a theme, Kalina chose “bridges, gates, and windows,” but none of his images are modeled after a particular European monument. Rather, they represent features that can be found in many parts of Europe. The face of each bill depicts a characteristic window or gateway from one of the historical periods set against the 12 stars of the European Union (figure 11). Why twelve stars? The official explanation is:

“Against the background of blue sky, twelve golden stars form a circle, representing the union of the peoples of Europe. The number of stars is invariable, twelve being the symbol of perfection and entirety.”<sup>4</sup>

The backside of each portrays a picturesque but fictional bridge alongside a map of Europe. In the next few years, as many as 12 billion of these notes will be printed by 12 national presses.

From the focus group came the news that a bridge construction specialist noticed familiarities in some of the structures used. The Pont de Neuilly in Paris, among others, stood out as a recognizable landmark. Kalina headed back to the computer to further redraw many of the bridges identified and study the sources where he

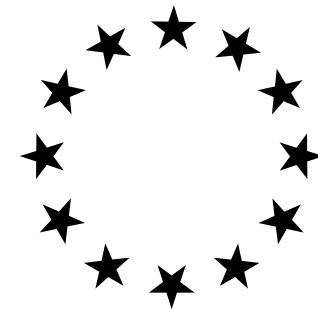


figure 11  
A unified circle of twelve stars symbolizes the European Union and is seen on all euro notes.



found his inspiration. In the end, this new group of specialists were a final test for the images of bridges in the designs.

But now that a design was accepted, the real work of making money began. How can this new document be secure from counterfeiters? How can these new notes be produced? Many production matters had to be considered for the final design: offset, high and silk screen printing, over etching the final artwork, creating watermarks and other applications like foil stamping and special inks. Microprinting and other invisible safety features were all applied to the designs. Kalina was constantly aware and concerned that the aesthetics of the new currency not be given a secondary role in the production. One last detail that was required by the EMI (European Monetary Institute) was the availability and usability to the blind and seeing impaired. In other words, the new documents not only had to be different sizes and color, but also had to demonstrate obvious tactile differences.

\$0.25

In addition to Kalina's work there are several other design features in the new currency of the European Union. These designs and the following features are:

- the name of the currency – euro – in both the Latin (EURO) and the Greek (ΕΥΡΩ) alphabets;
- the initials of the European Central Bank in five linguistic variants – BCE, ECB, EZB, EKT and EKP – covering the 11 official languages of the European Community;

- the copyright symbol (©) indicating copyright protection; and
- the flag of the European Union.

Each individual denomination is different in size, color and, as designed by Kalina, features a different architectural style, as you can see in the samples (figure 12).

They are:

<b>Euro</b>	<b>Size</b>	<b>Color</b>	<b>Style</b>
5	120 x 62 mm	Grey	Classical
10	127 x 67 mm	Red	Romanesque
20	133 x 72 mm	Blue	Gothic
50	140 x 77 mm	Orange	Renaissance
100	147 x 82 mm	Green	Baroque and Rococo
200	153 x 82 mm	Yellow-brown	Iron and glass
500	160 x 82 mm	Purple	Modern 20th century

Additional security features were implemented as were various printing processes to fulfill all requirements established by the EMU.

A printing process created a “raised” print feel that gives the notes their unique feel, much like that of American currency. When the banknote is held up to the light, a watermark, security thread, and see-through register are visible. All three features can be seen on the front and the reverse sides of genuine and official banknotes.



\$0.26

figure 12  
A sampling of the euro notes shows the theme of architectural epochs as designed by Austrian designer Robert Kalina.

Holograms are also incorporated in these new notes. A foil stripe hologram is seen on the front side of the lower values and a foil patch hologram is seen on the higher valued notes. Both, when tilted, shift shape and content within the hologram. On the reverse side of the lower values, when tilted, the brilliance of the iridescent stripe shows, and the color shifting ink on the high-value banknotes also shows when tilted. Holograms and color shifting ink have become a common security feature on many currencies because of their difficulty to reproduce.

### **A New Symbol for a New Currency**

The euro symbol (figure 13) was created by the European Commission as part of its communications work for the single currency. The design had to satisfy three simple criteria, like all typographic symbols. These were:

- to be a highly recognizable symbol of Europe;
- to be easy to write by hand;
- to have an aesthetically pleasing design.

Thirty or so drafts were drawn up internally by the European Commission. Of these, ten were subjected to a qualitative assessment by the general public. Two designs emerged from the survey well ahead of the rest. It was from these two that the then President of the Commission, Jacques Santer, and the European Commissioner in charge of the euro, Yves-Thibault de Silguy, made their final choice.

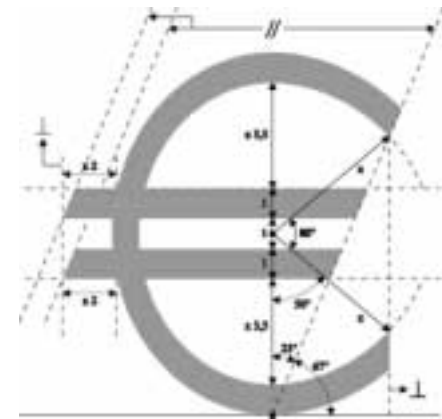


figure 13

The Euro symbol's design and architecture inspired by the historic inspiration of the Greek letter epsilon.

The symbol was born out of historic inspiration of the Greek letter epsilon, harking back to Classical times and the cradle of European civilization. The symbol also refers to the first letter of the word "Europe". The two parallel lines indicate the stability of the euro. The official abbreviation for the euro is EUR and this has been registered with the International Organization for Standardization (ISO).

Despite all this and many other design complications and revisions, Kalina delivered his completed designs in June 1997. As many as 13 billion of these notes were printed by 11 national presses in advance for their release in January 1999.<sup>5</sup>

Euro coins were not a part of the design competition. The faces of euro coins depict maps of Europe and the 12 stars of the European Union, while the reverse sides feature national symbols. The euro coins are minted by the twelve individual countries, as opposed to the European Central Bank. Here is where each country can brand itself visually with the familiar icons their currency once held. Each national government is responsible for the reverse side of those coins printed in its country. With eight euro coins and 11 participating countries, there are now 88 such designs. Nine national mints produced over 76 billion coins.<sup>6</sup> Coin designs from Germany, for instance, feature the Brandenburg Gate and the symbolic German eagle. Italian designs, selected in part by a national telephone poll, depict Leonardo da Vinci's *Renaissance Man* and Alessandro Botticelli's *Birth of Venus*. With the success of the euro, this new currency has the chance to become a worldwide

symbol of international currency, and a model for other nations and countries when considering redesigning their currencies.

The successful development of the euro is central to the realization of a Europe in which people, services, capital, and goods can move freely from one country to another. The introduction of the Euro has been the largest monetary changeover the world has ever seen.

## THE UNITED STATE OF THE DOLLAR

### Redesigning the dollar

The United States has begun to introduce the latest redesign of American currency (figure 14). The most noticeable change in the new design includes colored backgrounds. America's currency has always been the dark green custom-formulated ink. The impression has always been that colored money appeared to be playful, much like Monopoly money. Ootje Oxenaar, designer of the Dutch paper guilder said in a NOVA broadcast on PBS, "The only money that really inspired me, in fact, was play money, like Monopoly money."<sup>1</sup> Not only are the Dutch guilders aesthetically attractive but they are user-friendly, as well. Oxenaar further explains, "It was clear what you had in your hand, the type was clean, the colors were bright and vivid. They were also easy and practical to produce and were very well protected."<sup>2</sup> Perhaps the Dutch example, along with other global examples, will help keep the United States in the forefront of currency design and protection. What other aspects the United States will incorporate as "best practices" and what the new bills will look like was discovered when the next generation of currency was revealed in late 2003.

The twenty dollar bill was the first to be redesigned and issued because it was the greatest victim of counterfeiting. The most noticeable change to the redesigned document has been the addition of color. Since the government began issuing currency, the specific green ink has been the predominant color. It is also the most



figure 14

The new face of United States currency, as shown on the top, has a more open feel to it as compared to the previous design shown on the bottom. The newest improvement is the addition of subtle background colors which will change with each denomination.

recognizable feature of American currency.

The subtle addition of the muted color palette makes duplicating the bill considerably more troublesome for criminal elements. It will also begin to give each denomination a distinct look because future denominations will have their own unique background color. While this is new for the United States, other countries from Mexico to Japan have known that distinct colors of currency help in the recognition of individual denominations. Color has always been used to visually separate the range of currencies.

This color aspect also impacted me in my respect for money. If the money was green, I knew it was part of my world; something unique to me which deserved respect. The money had the power to buy me what I needed or even didn't need, but it was in my power to control these pieces of paper. Other money was always seen as play money. I could not spend it, therefore it was worthless for its intended use, but really interesting as a souvenir or a glimpse into another place.

However, even with the addition of color, the newly redesigned note retains the distinct size, overall look and feel of the old familiar greenback. Other updated features of the new bill are the symbols of freedom; the portraits and scenic vignettes; and a watermark, another feature long used in European countries.

The two new symbols on this redesigned document both focus on our national bird and symbol of freedom, the American eagle (figure 15). Two of them now appear on the front of the note. The first is found to the left of the portrait of Andrew Jackson in the background. This large blue eagle is representative of those drawn and sculpted during the time period. The smaller eagle on the right is a more contemporary engraving. It is also printed in metallic green ink, which also helps to combat counterfeiting. Both these eagles are specific to the twenty. Symbols of Freedom, as these symbols are known as, will differ for each future denomination.

The next element of the redesigned bill is the work done on the portrait of President Andrew Jackson (figure 16) and the White House on the reverse side (figure 17). These two elements traditionally have been confined and formally presented in a frame or border of rules on the bill. These oval borders and fine lines have now been removed and the President has truly been set free. Jackson is now seen as a huge presence on the front of the bill. He dominates the front side and reaches from the bottom of the page all the way up into the top border. Jackson now is a formal bust of the man he was – formal and grand. He now has shoulders that have been added to the engraving to complete what was not there before.

The White House, the dominating image on the back, has also been set free from its previous borders. The image still retains its oval shape but does not have the confining oval or formal rules. Additional engraved details have been added to fill out the



figure 15  
Two new Symbols of Freedom, the American Bald Eagle, as seen on the newly redesigned United States currency.



figure 16  
Andrew Jackson does have shoulders and they have been added to the engraving of him on the new face of the twenty dollar bill.



vignette's background.

There are several other features found in the redesigned bill that give the document its new look. One is the inclusion of microprinted text (figure 18). Microprinting is primarily a security feature which is difficult to reproduce due to its size. On the face of the bill, there are two areas where this technique is used. The first is the inscription "USA20" which is printed along the border of the new "TWENTY USA" ribbon of type on the right hand side of the bill. The words "THE UNITED STATES OF AMERICA 20 USA 20" are microprinted in black in the border below the signature of the Treasurer.

On the backside is a new low-vision feature (figure 19). The denomination 20 found in the lower right hand corner allows for easier identification for the user. With an ever increasing older population, this feature is increasingly important.<sup>3</sup>

The paper that the currency is printed on remains the same. Made by Crane Paper in Massachusetts, the paper is one-fourth linen and three-fourths cotton. It continues to contain red and blue fibers (figure 20) as an additional security feature. Paper production will be discussed at length later.

The security thread (figure 21), which is actually a plastic strip embedded in the paper, remains running vertically through the document. Once again, microprinting of "USA TWENTY" and a small flag are on this strip. This thread also glows green



figure 17  
The White House is taken out of its previous border and is now seen as a soft vignette on the backside of the new twenty.



figure 18  
Two samples of microprinting on the new bills are seen in the background and border of the face.



figure 19  
Denominations are larger to allow for low-vision users and easier identification.

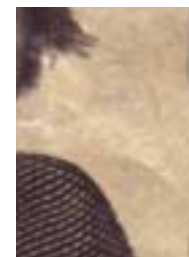


figure 20  
The same identifiable red and blue fibers are still a unique feature of the paper used in printing Unites States currency as made by Crane Paper.

when held under ultraviolet light.

Color shifting ink (figure 22) is used as yet another security feature, but also gives American currency a distinct look. On the twenty dollar bill, the number 20 in the lower right hand corner on the face of the bill changes color as the bill is shifted. The color shifts from copper to green depending on the reflection of light.

Lastly, a watermark (figure 23), or faint image, of the figure featured on the bill has been incorporated into the bill. The watermark is actually a part of the paper and, unlike a typical watermark found in fine printing papers, is very closely controlled in position on the paper. Often times a watermark is random throughout the paper, but not here. Found on the right side of the face and in reverse on the back side, the watermark is similar to that of the portrait of Jackson. Faint enough not to be seen when just holding the bill, when held up to light the mark is clearly seen from both sides of the bill.

### **Why Andrew Jackson and Who Chooses?**

The Secretary of the Treasury is responsible for the selection of the designs, including the portraits, which appear on paper currency. The July 11, 1862 Act of Congress provided:

"That the Secretary of the Treasury be, and is hereby authorized, in case he shall think it expedient to procure said notes, or any part



figure 21  
The old tradition of a security thread still is a part of the new currency, although today it is actually a thin plastic strip.



figure 22  
The denomination on the face of new bills shifts color from copper to green when the new notes are tilted.



figure 23  
A watermark of the president featured on the face of the bill is actually a part of the physical characteristic of the paper. The tones are seen due to the thickness of paper fibers during the process of making the paper.

thereof, to be engraved, printed, and executed, in such form as he shall prescribe, at the Treasury Department in Washington, and under his direction; and he is hereby empowered to purchase and provide all machinery and materials, and to employ such persons and appoint such officers as may be necessary for this purpose."<sup>4</sup>

The portraits currently appearing on the various denominations of paper currency were adopted in 1929, when the size of the notes was reduced. Prior to the adoption of this smaller sized currency, a special committee was appointed by the Secretary of the Treasury to study this aspect of the design. It was determined that portraits of Presidents of the United States have a more permanent familiarity in the minds of the public than any others. This decision was somewhat altered by the Secretary of the Treasury to include Alexander Hamilton, the first Secretary of the Treasury; Salmon P. Chase, the Secretary of the Treasury during the Civil War and credited with promoting our National Banking System; and Benjamin Franklin, one of the signers of the Declaration of Independence. All three of these statesmen were well known to the American public.

Treasury Department records do not reveal the reason that portraits of these particular statesmen were chosen in preference to those of other persons of equal importance and prominence.

## Frequently Used Portraits on United States Paper Money

Note	Face	Back
\$1	George Washington 1st U.S. President	The Great Seal of the United States
\$2	Thomas Jefferson 3rd U.S. President	Signing of the Declaration of Independence
\$5	Abraham Lincoln 16th U.S. President	Lincoln Memorial
\$10	Alexander Hamilton 1st Secretary of the Treasury	U.S. Treasury Building
\$20	Andrew Jackson 7th U.S. President	White House
\$50	Ulysses Grant 18th U.S. President	U.S. Capitol
\$100	Ben Franklin Statesman	Independence Hall
\$500*	William McKinley 25th U.S. President	Numeral 500 and the ornamental phrase "Five Hundred Dollars"
\$1000*	Grover Cleveland 22rd & 24th U.S. President	Numeral 1000 and the ornamental phrase "One Thousand Dollars"
\$5000*	James Madison 4th U.S. President	Numeral 5000 and the ornamental phrase "Five Thousand Dollars"
\$10,000*	Salmon Chase	Numeral 10,000 and the ornamental

\$0.36

	U.S. Treasury Secretary under Lincoln	phrase "Ten Thousand Dollars"
\$100,000 Note*	Woodrow Wilson 28th U.S. President	Numeral 100,000 and the ornamental phrase "One Hundred Thousand Dollars".

This \$100,000 note never appeared in general circulation, and was only used in transactions between Federal Reserve Banks.

\* = Notes no longer in print or circulation

### **JSG “Just Some Guy” Boggs**

Others have a different view of who should be featured on the currency. J.S.G. Boggs, a controversial artist, even known as America’s premiere money artist, has offered his own variations. Boggs has drawn the wrath of the Secret Service. Why? Boggs not only makes his own cash, he also “spends” it.

Boggs says that people often make a fundamental mistake. They ask, "What differentiates money from art?" He answers, “Money is art. It's pictures and pigment on paper. It's portraiture, it's landscape, it's abstract geometric. And it is the ultimate abstract art. It's a symbol for something else.”<sup>4</sup> He says that money is the most public of public arts, and it has to catch up and reflect our society today.

Who truly makes up America? Do the people portrayed on the currency really

represent the face of all those who made America the country it is today? Boggs says no and proposes his own series for American currency. On one of his one hundreds, he pays tribute to the leader of the Underground Railroad, Harriet Tubman. He chose Harriet Tubman because she fits all the criteria for whom we should have on our money. She was a great American hero who risked her freedom for right in the face of all adversity. That is everything that we worship as Americans.

To keep his currency and art current, Boggs often asks people on the street who they would like to see on currency. He often hears a woman's name: someone that is well-respected by the United States as a whole. Is it possible to come up with a face like that? Why not make a composite sketch of what an American looks like? They are big and jowly. Put different ethnic features in a face protruding through the bill, and that is your composite sketch. That is who an American is.

While Boggs is the art world's most renowned money man, he is not the only artist with novel proposals for a new US currency. Others have followed in Boggs' footsteps and have created bills that honor a range of great Americans, from Martha Graham to Martin Luther King. Some stay with traditional historic icons like Benjamin Franklin, heeding tradition.

But is simply the creation of this document making money? Boggs believes, as does the history of currency, that a transaction must take place. You get something for the

exchange of the paper in your pocket. Thus Boggs seeks out transactions, legitimate transactions, to convert his art into true currency. Typically this process takes the form of a trade. There is no deception involved, lest the transaction be confused for counterfeit. Boggs finds something he wants and offers his art as payment for the good – be it a book, a hotel room, even plots of land. Once the transaction is completed the art now is currency. The value is set by what you can get for it, much like our current economy itself.

### **Dollarization**

All countries have their own currency. Some countries accept the American dollar for purchases, to borrow and to save. Because of this trend, countries around the world have become dollarized. Dollarization is such a major trend that many countries are considering abandoning their own national currency and adopting the ever so popular American dollar as their official currency.<sup>5</sup> Argentina and El Salvador have shown an interest in adopting the dollar, and Panama has already become officially dollarized.

Official dollarization simply means that a country has eliminated its own currency and recognizes the American dollar as legal tender. Businesses can pay their employees, pay their debts and settle contracts with the currency. Consumers can make their daily purchases with the dollar, and the government would accept the dollar for payment of taxes and other debt. Foreign territories have used their ruling country's currency, but it is when a self-ruled country adopts a foreign currency as its own

that dollarization truly occurs.

There are many political and economic reasons a country would consider becoming dollarized, but, for the purposes of this research, it is most important to be aware of this trend when considering the aesthetic appearance of the American dollar.

Europe has recently completed its initial version of dollarization with the introduction of the euro. Several countries in the European community have become a part of a common currency, losing their individual currencies for a common currency used across borders and maintaining a stable and common rate. But it has affected national pride.

### **Steven Gagnon and Dollarization**

Steven Gagnon, a Miami-based artist, has celebrated both the dollar and America in his art. His most noted piece, “The American Way (figure 24),” celebrates all that is America in his flag painted on an actual sheet of uncut dollar bills. In his statement, Gagnon says:

“I was inspired to make this piece because I wanted to make an image that could symbolize American culture that would relate to all Americans regardless of their race, nationality, religious, or political backgrounds. I wanted to create an image that would overlook these differences and find a common thread that could represent a nation of

\$0.40



© 1999, Steven Gagnon

figure 24  
“American Way” by Steven Gagnon is actually painted on an uncut sheet of one dollar bills.



such diversity. The dollar is a symbol of America as much as the flag. It is respected around the world for the exchange of goods and services due to its stability and strength. It enables all Americans to enjoy the fruits of their labor and pursue their happiness. Thus by uniting a sheet of one dollar bills with the flag, I created a universal image to symbolize America's strength, and its never-ending pursuit of happiness."<sup>7</sup>

Indeed, Gagnon has found what unites all America and even the world: the pursuit of the American dream, often made possible by the all-American dollar. The dollar easily represents what the flag does as a national symbol. He further pursued the dollar as an artform in his dollarization series which celebrates those countries that have adopted the dollar as their legal tender.

Focusing on the idea of dollarization, Gagnon has produced a series of pieces simply titled *Dollarization* (figure 25). The series of pieces uses the dollar as a backdrop for the various nations' flags. The method creating these pieces is similar to that of his "American Way," but the work seems to show the impact of globalization with dollarization. His flags of Ecuador and El Salvador celebrate their adoption of the American dollar as well as his flag of Panama. Once again, an uncut sheet of dollar bills is his canvas on which he paints the flag of each country. Uniting these two diverse images shows the economic and cultural impact the American dollar has had on these very different countries, from an American point of view.



© 2001, Steven Gagnon



© 2001, Steven Gagnon



© 2001, Steven Gagnon

\$0.41

figure 25

A series of paintings by Steven Gagnon explores the concept of dollarization, which is a country adopting use of another country's currency as their own. Shown here from the top are Ecuador, El Salvador and Panama.

One of Gagnon's most recent works focuses on the recent introduction of the euro on the European landscape (figure 26). This piece shows the unification of diverse countries coming together under a common currency. Gagnon explains the work in his statement:

"We live in a time of globalization. There is a power and synergy when a group comes together. In the present economic climate, it is too difficult for smaller nations with limited resources to be able to effectively compete in a world market. Thus by pooling their resources to become one, they can more effectively compete in an international economy. So for me, to combine the European community flag with the Euro 500 bill seemed logical. For in the end, this is what the union of multi-nations is trying to achieve. Individually, the countries of the European Community would have a difficult time to compete in the international market. As one economy, they are an influential economic presence."<sup>8</sup>

If economically Gagnon's artistic attempt comes to fruition, it is yet to be known. But, from a cultural and aesthetic perspective, he has essentially created a new flag or symbol that can represent a diverse cluster as one unified group. But as comprehensive and ideal as this new symbol is, the individuality of each country is lost in the unification of its currency. That is one fundamental problem of globalization.



© 2001, Steven Gagnon

figure 26  
In Gagnon's piece using an uncut sheet of euros, the unification of diverse countries coming together under a common currency is explored as a dimensional undulating canvas.

Gagnon explores the concept of globalization as a negative force in his work called *Money Whip* (figure 27). In this piece, Gagnon explores the economic and financial struggles of life that many looking for a better life encounter. It also explores the feeling of being bound to a symbol that is often hard to achieve: wealth and being a slave to money. Many people recognize the struggle of living paycheck to paycheck, but at the same time know that if there is a place they can make it, it is in America; where opportunities abound.

*Money Whip* is a sculptural piece that incorporates more than 100 United States dollar bills that are bound to the individual leather strands of a whip. Gagnon says this piece speaks to the economic oppression that money represents as a condition or way of life.

### **Cat Chow**

Cat Chow, an artist often confused with a fashion designer, also explores this concept in her work entitled *Not For Sale* (figure 28). *Not For Sale* is a slinky, seductive, floor length dress made from one thousand one dollar bills. Her background in working with chainmail gave her the skills she needed to shred the currency into half inch strips and sew them together to create the fabric needed for this piece. If fashion is about getting people to look at you, this dress does, and it stares right back.



© 2001, Steven Gagnon

figure 27  
Gagnon explores the emotional ties to money in this sculptural piece called *Money Whip*, which is made from actual currency.

As Cat Chow herself explains:

“If you look down the front, center and back seams, you see George Washington’s face looking at you. It was just this little detail that I wanted to share, cause when I was sewing the dollar strips I would come across his eyes and everything and it would kind of freak me out in a way.”<sup>9</sup>

The dress also makes a further comment on the dollar and on fashion. The dress is called “Not For Sale,” and it isn’t. Chow has had many offers for the dress, but it is the fact that she will not sell it that adds to its allure. Money is a commodity, but the dress is not. Rather it is a statement of how we wear our perceptions of money and status, and our preoccupation of what we can and cannot buy.

## **Globalization**

Citizens of different countries and cultures, although wanting a better life for themselves, often outside their native homelands, do not want to forgo their individual cultures. They may want all a new country has to offer, but not want to leave their history, traditions, and who they are behind. It is only natural that if someone from Sarajevo comes to America for a better life, to be successful in his or her new home, he or she would have to assimilate. That would mean a different form of dress, learning a new language, but to lose their own identity is something very few want to lose.



© Cat Chow | Photography used with permission of James Prinz

figure 28  
Artist Cat Chow  
makes a statement of  
how we wear our perceptions of money and  
status in a floor length dress made from one  
thousand one dollar bills.

**\$0.44**

When in their own homeland they lose part of their national identity, their currency, it is understandable there might be some resistance to that change. That is something that has happened with the introduction of the euro. The national identity of the participating countries has been removed.

## **THE MAKING OF MONEY**

### **Paper**

The foundation of currency is the material on which it is printed. The earliest beginnings of United States government-issued paper money as we know it began in 1690 and was issued by the Massachusetts Bay Colony to pay soldiers returning from battle.<sup>1</sup> But paper money actually had its inception in China hundreds of years earlier, and, in Egypt, with papyrus, before that. The printing presses which turned out the money have been credited to financing the American and French Revolutions, as well as the Civil War.<sup>2</sup>

In the United States, Crane & Company, located in Massachusetts, has made the special paper for American currency since 1879. Their fine paper is unlike any other in the world. For the new currency, Crane redesigned it to be even more secure against counterfeiting.

In redesigning the paper, there was one property that could not change: the tactile feel, stiffness, and texture that the public has become accustomed. That stiffness and crackle, is fundamental in detecting counterfeits in circulation. It is recognized by more bank tellers, and more merchants at the point of sale, than any other property of the paper. Therefore, maintaining the stiffness, texture and crackle of the paper was not to be changed. It was imperative to the redesign of the currency.

The raw materials that typically makes paper comes from wood, and is not what goes into making the paper for banknotes. The materials for banknote paper come from many of the same materials used to make fabric strong: cotton and linen. Levi Strauss along with many other denim makers supply the scraps from their production to the production of paper for currency, but the major ingredient by far is raw cotton. During the process of making the paper pulp, the first security feature is incorporated. The greenish, off-white tint of the pulp is carefully adjusted. Red and blue fibers are added, a safeguard of US currency for more than a century. The Secret Service has observed that few counterfeiters effectively recreate this feature.

Tim Crane, of Crane & Company, sums up paper by comparing the paper for currency to pizza making. He says, "Currency is kind of like a pizza. There's the base crust, which is the paper, and all the toppings. And they may be printed features. They may be papermaker features. They may be optically-variable devices. But in any case, all of this pizza is built up on the extremely important crust, the durable banknote paper. And without the durability, the circulation lifetime, the resistance to wear, the pizza would fall apart."<sup>2</sup>

\$0.47

### **Security Threads**

Security threads in banknote paper, while a very old idea, is a critical feature. Security threads were originally actual cotton threads, three, joined together very closely, running across the paper. Some early samples had single threads. These early security

threads served to denominate the banknote, and to prevent a low denomination from being washed clean of its ink – a counterfeiters trick, and being raised to a higher value.

Security threads today, are now made of a plastic material, have numbers on them denoting the bill's value. The numbers on the plastic threads are only forty-two thousandths of an inch tall. Cutting the plastic film into individual threads, requires immaculate precision monitored by cameras and computers. The text is clearly visible in transmitted light, but cannot be reproduced by the reflective light of a photocopier. Threads for the new currency also glow red under UV light. The security threads will appear in different locations on each denomination, making counterfeiting the notes even more difficult. The threads are embedded into wet paper pulp on a giant machine that shapes Crane's paper. Using furnace-like heat, the machine dries the pulp into finished paper. The final rolls, eight feet wide and weighing more than four tons, hold paper strong enough to make money.

\$0.48

### **Watermarks**

Watermarks were first used in the late thirteenth century in Italy,<sup>4</sup> to mark important documents and show that they were authentic. There's a common misconception that the watermark is something imbedded in the paper after the paper is made. Watermarks are actually a part of the three-dimensional structure of the paper. They are not added to the paper, but formed within. What makes a watermark appear is



actually quite basic: paper fiber is more dense in the opaque, dark areas, and less dense in the light, more transmissive areas. As a result, there is an astounding range in tonal gradation, that, to the feel, to the hand of the paper, it is hard to imagine that it is simply a variation in the thickness and the density of the paper.

To create a watermark, the image is scanned into a computer that will generate instructions for an engraving machine to cut the image into wax. The result is a rough wax template. The final mold requires a human touch, and the more wax is scraped away, the more room will be available for paper fiber to build up, creating darker areas in the image. This Old World artistry is still critical for a 21st Century banknote. From the wax template, a hard, copper die is created. It is used to stamp the image into a sheet of wire mesh. When wet paper pulp is dried on the wire sheets, the image will be indelibly formed. Human inspection safeguards the high quality of watermarks, but most inspection of Crane's paper is done by machine. As the paper is cut, cameras catch even the slightest defect in the sheets speeding by and any rejects are automatically cast out. The final reams are trimmed, taped, stamped, and shipped. These seals must only be broken when the paper reaches the Bureau of Engraving and Printing.

The paper will then be printed with specially formulated inks to fight counterfeiting. The green of American greenbacks does not come from a single pigment. It is made from a secret mixture of pigments and binding agents. Dollar green is quite hard to

copy, but would it not be even harder if combined with other colors? In Holland, bright primary colors have given banknotes a decidedly modern look. Oxenaar, the celebrated Dutch designer, paved the way in the '70s.

Although paper of all qualities and techniques is the predominant material currency is printed on in all countries, some countries have taken technology even further. Australia might ask the question, paper or plastic? The astounding answer is actually plastic. Australia began printing their currency on a nearly indestructible plastic sheet in 1988, adding to the life span of each note. The plastic material is also said to be a more sanitary material than paper. About 20 other countries, including New Zealand, Brazil, Thailand, and Northern Ireland, have since followed Australia's lead. Mexico has even begun the same changeover in late 2002. Bank of Mexico's Governor Guillermo Ortiz acknowledged the high security feature of the plastic substrate as defense against counterfeiting.<sup>5</sup>

\$0.50

The plastic is also used as part of the design as well as a unique security feature. Whereas a watermark is a security feature used in many currencies printed on the more traditional paper, the plastic substrate is not suitable for this technique. Australia, as well as the other plastic currency countries, have turned to creating an actual window, a clear area, that allows the plastic material to be seen through the note. Each denomination has its own unique window, just as many other currencies have a unique watermark.

## **Ink on Paper**

The United States considered colored currencies a terrible thing, resembling play money, thus symbolizing low value. In the United States, we expect a very traditional, very classic design. Any new design must insure that the resulting document look valuable. In the '70s, the government looked at color as potentially having some additional security value. However, they determined that modern reprographic systems are so good at reproducing multi-color, that, in fact, the addition of color was found not to be an enhancement to the security.

Once again respecting tradition, American currencies would remain dollar green and black, while adding muted colors in the background. In consideration of security, they considered the addition of a hologram, as used in many European countries. Could a hologram work on US currency? Holograms appear as three-dimensional images on a two-dimensional surface and can safeguard against even sophisticated forgers. Some countries have put them only on their high-value notes. Holograms are delicate foil structures that can be easily damaged, thus lessening the lifespan of the bill.

All features for the currency have to pass a series of grueling trials in the Bureau's banknote torture chamber: from crumpling to soaking in gasoline and ethanol. A test note is subjected to merciless rubbing and the equivalent of weeks of intense sunlight. They run it through washing machines and dryers, and put it in cement mixers with dirt, soil and blocks to try and simulate things that can be done to the currency.

The first hologram failed with a single crumple. The Treasury was determined to create an image-shifting device, like a hologram, but one that can survive the crumpler. They turned to employing a team at Flex Products in California. In their first attempt, they deposited thin layers of reflective and clear materials on plastic strips, creating a foil that changed color when struck by light from different angles. This foil would be hard to counterfeit, but the delicate foil would be crushed by the crumpler. In the second try, they stripped off the top layer of foil and ground it into a fine powder when used as a pigment in ink could be printed on currency. The ink showed an excellent color-shift from black to green. Even after multiple crumples, the color-shifting endured. This color-shifting ink is now used on one of the denomination elements on the face side of the newly redesigned notes.

## PRINTING

There are several printing processes, that produce different results and levels of quality. For what currency is and represents, it is important that the documents look valuable and of the highest quality possible. Intaglio printing is the method that produces such results. Rotogravure or gravure, as it is more commonly referred to, is an example of the intaglio printing method.

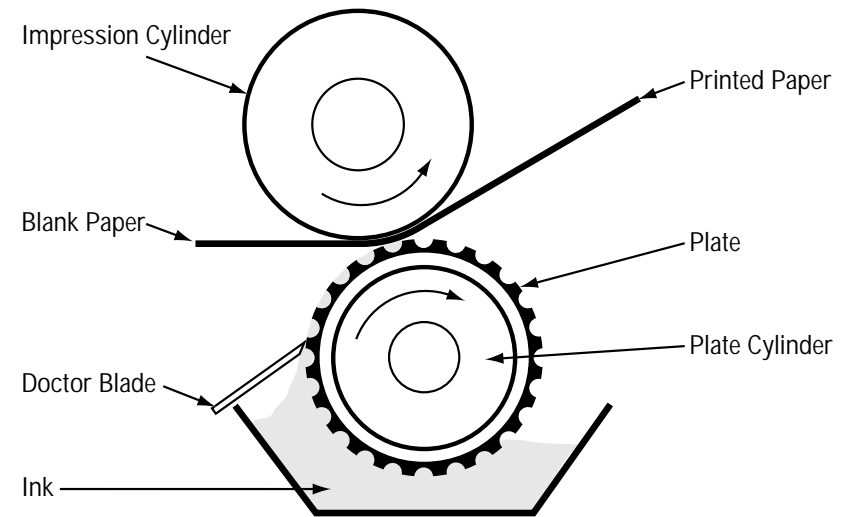


figure 29

Gravure printing, although looking very simple, produces high quality results and is a perfect choice for reproducing engravings.

Gravure printing (figure 29) is considered to be excellent for reproducing pictures, a basic requirement for printing currency. The expense of making the gravure printing plates usually requires the print run to be one of high volume, which currency runs typically are. A distinctive feature of this process is that the entire image is screened. Typography, line drawing and half-tone images are all screened for reproduction. Typical gravure line screens are 150 lines per inch,<sup>1</sup> virtually invisible to the naked eye.

Within gravure printing, there are three types of gravure, each producing varying results and used for specific purposes. The three types are: conventional, variable area-variable depth and direct transfer or variable area.

Gravure uses a sunken or depressed surface for the printed image. The image area to be printed consists of cells or wells etched into a copper cylinder or wraparound plate,

and that cylinder plate surface represents the non-printing areas. That cylinder then rotates in a bath of ink, which, through surface tension, fills the cells of the engraving. Excess ink is wiped clear with a flexible steel blade commonly referred to as the “doctor blade” and returned to the inkwell. The ink remaining in the cells forms the image by direct transfer to the paper as it passes between the plate cylinder and the impression cylinder. The impression cylinder is covered with a rubber composition that presses the paper to make contact with the ink of the printing surface.

It is important to know that the inks used in the gravure process are volatile petroleum solvents and have the ability to dry nearly instantly. During the printing process, hot air dryers facilitate the drying of the inks, a valuable factor since in color printing each ink color is printed on dry color rather than one that is still wet as is the case in letterpress or offset printing. Also in color printing, presses use electronic systems for registration control.

The copper or steel color printing cylinders are also chromium plated for long run situations of one million impressions or more. When the chromium starts to wear, the plate is stripped and rechromed. The chromium helps with the life of the plate, so that new plates do not need to be made when they wear down.

### **Steel Die Engraving**

The tell-tale sign of virtually all counterfeits, whether color copied or offset printed,

is their flat look and feel. The raised ink quality of genuine currency is the result of a special gravure printing process called "intaglio." It begins with fine-line engravings carved in soft steel. From hand-cut engravings, final printing plates are made for mass production on enormous intaglio presses. Ink will fill the grooves of the engravings just as in the gravure process, and under twenty tons of pressure, will be forced out onto the surface of the paper. The resulting banknote has the raised ink feel and three-dimensional look that are the hallmarks of the genuine article.

Steel-die engraving is an intaglio process in which the die is hand or machine cut, or even chemically etched to take on the ink. The plate in this process is inked so that all surfaces and sub-surfaces are filled. The surface is then wiped clean; and the paper that is used is slightly moistened. The paper is then forced against the plate with high pressure so as to draw the ink from the depressed areas of the plate and onto the paper. This process produces the characteristic embossed look and feel on the surface, while the back side has a slightly indented surface. For a run with the volume and frequency that currency prints, the plates are used in a die stamping press. This process is what produces much of the characteristic look and feel of United States currency as well as many other currencies.

## **COUNTERFEITING**

“Whether in Italy or Mumbai, everybody takes greenbacks,”<sup>1</sup> says Phil Keoghan, host of the reality series *The Amazing Race*, which sends contestants around the world with funds of American dollars, proof that America’s currency *is* the world’s currency.

US currency has remained almost unaltered for nearly six decades. Its elegant but archaic design helped make it the most counterfeited in the world. With its 19th century look, it has been ill-equipped to fight counterfeiters in the 21st century. US currency has been extremely vulnerable to counterfeiting for two reasons. First, the design was created back in the mid-20s, released in 1929. It has given people a tremendous opportunity to practice their skills at counterfeiting. The second reason is that it's an international currency, it's valued all over the world. And the further that you get from the United States, the less people have an appreciation of what a genuine note looks like.

Counterfeiting has been one of the greatest motivators for a country’s need to redesign its currency. The problem has been most impactful in the United States due to its currency being an international currency and used worldwide. The United States Treasury has long withstood the need to change the ever popular greenback. While other countries were keeping ahead of the counterfeiters with their design and counterfeiting deterrents, America stood firm against change. But finally, with counterfeiting threats that were unthinkable years ago, the Treasury relented and



began the first major redesign in mid 1996.

While not tinkering with the brand that has been developed and is recognized worldwide, a document was developed based on a comprehensive sampling of global currencies. Most people simply noticed that the portrait grew larger, more white space appeared, and a less formal overall appearance prevailed. Yet there were several high tech, counter counterfeiting elements included to combat the nearly \$2 million dollars in casual counterfeiting and the over \$360 million in high volume counterfeiting last recorded in 1995, the last year it was recorded.<sup>2</sup> In 2001, according to Secret Service, counterfeiters put \$47.5 million into circulation. Every day in its New York branch, the Federal Reserve – the nation's central bank – sorts and processes over twelve million used notes. Machines check the optical and magnetic properties of each bill so that counterfeits can be detected.

\$0.57

Other countries have been very innovative in their anti-counterfeiting measures. Australia has produced their currency on a plastic like material. They have incorporated in their design areas which are clear of any image, allowing a window to show through the note. Copying the currency on even the highest end color copiers will not allow that transparent area to remain. Austria uses the modern technology of a hologram-like device called a kinogram as a security feature in its design. While a hologram is a three dimensional-looking image, when looking at the kinogram of Mozart, he appears to look one way, and if you tilt the note, he looks the other.

We tend to think of these elements, things that are shiny or things that are added to the note as decorative, but they are actually a security feature. Everything from the paper, ink, printing, design, *everything* is intended to add some level of additional security to the document.

For years, the key to making counterfeit currency was a good negative. Any skilled printer with a knowledge of traditional printing skills could essentially print currency, but a single negative is not enough for the counterfeiter. The bill has two colors, green and black, and a separate negative is needed for each. The Treasury has designed some primitive obstacles by overprinting the seal on the denomination amount. The green Treasury seal somehow must be removed from the word printed in black below it. Once again, any skilled printer can do exactly that and create two plates to begin the counterfeiting process.

Today, counterfeiters do not need to shoot a negative. Laser scanners, desktop computers, digital imaging, and color copiers all replace the work of photography in making printing plates. After the fine-line details of the bill have been converted into electronic data, the touch-up work for the counterfeit begins. After a good copy of a bill is obtained by photography or laser scanner, the next step is to make a plate for printing. Adding carefully-selected ink, and some fine-quality paper, the counterfeits are ready to roll. Offset printing presses are responsible for 90% of all counterfeits. Sometimes, high technology is used to make things go faster, but the skills of a

printer are still needed to produce the notes. Even copying a Federal Reserve note is a felony unless, of course, it is enlarged to 150% of its actual size.

The traditional counterfeiter had to buy fairly large, sophisticated equipment and materials. Those items are easy for law enforcement people to monitor and to control. The concern of today is that modern reprographic equipment – copiers, scanners, computer printers – is available in the office place and even the home. The concern of five people each making ten thousand notes is much different than ten thousand people each making five notes.<sup>3</sup>

Casual counterfeiting is growing. Evidence of this new style of counterfeiting has accumulated in the archives of the Secret Service; their files contain over 20,000 varieties of notes, some more convincing than others.

\$0.59

Color copier notes look different from a genuine for a number of reasons. They give off a somewhat shinier appearance. Because genuine currency is not white paper, the copier machine fills in the non-image area with toner, giving the counterfeit note an overall a somewhat yellow or dingy appearance. In addition, the entire image is just not nearly as clear. It is a lot muddier than you would see on a genuine banknote.

The real concern by the Treasury Department is the professional counterfeiter, not the casual counterfeiter. The casual counterfeiter obviously bothers them, because

somebody can take a note, put it on a photocopy machine, go down to a subway station or a money change machine, and be able to get some sort of currency. However, he or she is dealing with a ten, a five or maybe a twenty dollar bill. The real significant counterfeiting are the hundred dollar bills, circulating all over the world.

Almost two-thirds of US cash is overseas, creating a worldwide counterfeiting problem. Where demand for dollars is strong, such as in Russia, there has been a surge in high-quality counterfeiting. In 1993 alone, the amount confiscated abroad grew 300%. The most popular target of international counterfeiters is the \$100 bill. These counterfeit hundreds support arms purchases, the drug trade, and terrorist activity. There are even suggestions that counterfeiting is being used as a calculated attack on the United States. A Republican congressional task force issued strong charges in a 1992 report, warning: "Evidence has recently come to light that the governments of Iran and Syria are actively engaged in economic warfare against the United States through the production and dissemination of high-quality counterfeit dollar bills."<sup>4</sup> The report describes a conspiracy arising from the fallout of the war between Iran and Iraq. Short of hard currency, the Iranian government allegedly launched counterfeiting operations to help the country rebuild, charges the Iranian government dismisses. There are counterfeits of such high quality found in the Middle East, called "Supernotes."<sup>5</sup> They have the raised ink feel of bills printed on intaglio presses, equipment generally owned by governments.

Ninety percent of the presses that are used to print security paper come from one company, De la Rue Giori in Switzerland. Iran has these presses. They obtained them in the 1970s, as many other countries did throughout the world. Anybody that has this equipment has the same equipment the United States has, so it is not unthinkable that another country having these presses is capable of using them if they want to subvert the US economy.

The Secret Service has confiscated nearly \$10 million of the notes circulating in the Middle East, but the source of the Superbill remains elusive. Without definitive proof, the Secret Service will neither confirm nor refute the allegations of the state support.

\$0.61

There are a number of high-quality counterfeits circulating around the world, and there are high-quality notes that do come out of the Middle East. There are also high-quality notes that come out of Colombia, South America, and Canada. Tales of the Supernote and other counterfeiting threats led members of Congress to call for a currency redesign. Treasury decided to act, but the reasons are debatable.

The Treasury, in coming out with this redesign of currency, is responding to a significant threat, and it cannot be said for certain whether that threat originates in the Middle East or the Far East. But the money that the Treasury is spending on the change has to be in proportion to the risk involved.

The new currency is a response to growing technology, not a response to a specific crisis. The government assures us that there is no crisis. The American currency system is extremely sound, and there is very, very little counterfeiting actually in circulation. The redesign is to get ahead, and to stay ahead of the curve.

Whether staying ahead of the curve or playing catch-up, the Treasury has a massive job ahead. The initial roll-out calls for \$50 billion in new \$100 bills. They have started where the counterfeiting problem is most pressing, but every denomination, from the hundred down, will be redesigned and issued in the next few years. These notes must combat all types of counterfeiting. They must be difficult for color copiers to reproduce and stymie even the most sophisticated intaglio printing operations. To make a new \$100 bill, Treasury had to reconsider each element of the old note. They explored over 120 different security features, from bar codes to invisible inks to holograms, but of these many options, most would not make the cut. The key to security would be a balance of high technology and Old World craftsmanship.

## DESIGN

### People

Portraits are one of the oldest and most often used images used on currency. Few countries do not show people on their face side. It is a chance for a country to celebrate its leadership, heroes, cultural icons, or others of their citizenry who have gained national or international attention. Royalty and political figures remain the top two categories of people represented.

### Royalty

If what makes an Übermodel is the number of magazine covers she appears, then the Queen of England reigns supreme. The Queen of England (figure 30) finds herself on more than thirty countries' currencies. She remains on many currencies which were once British territories, and on others for the British rule legacy. She is also found in many iterations. Her native British pound illustrates her in a rather non flattering, perhaps most current, pose. She is shown wearing the crown jewels, looking ever the Queen, though her eyes are not quite lively and she almost seems to smirk. Has her portrait been updated several times in an effort to remain contemporary, or is it a matter of vanity?

Of course, while looking at a selection of England's currency, she ages gracefully as her portrait has been redone many times since her reign began. On an early one pound note (figure 31), she is shown in a cameo shape wearing her crown jewels



figure 30  
Queen Elizabeth is the top model when it comes to appearances on currency with more than 30 countries.



figure 31  
An early British note shows the young queen in a very formal cameo shaped portrait.

and simply labeled as “Elizabeth R” in a formal calligraphic script. The rest of the face has several very fine lined motifs – sure to confound counterfeiters – and more elegantly rendered calligraphic touches.

The back side of this note simply denotes its value (figure 32). Again flourishes abound on this decorative piece. The Bank of England seal is also shown, a unique element to English currency. The bank of England is responsible for the currency, not the Government. The Bank designs, prints and distributes the currency.

On a more current five pound note (figure 33), the Queen is once again shown in her crown jewels, but also in her robes. She turns her head to look out rather than the cold profile seen earlier. The page of the note is a fuller and richer story of her’s. A woman in a chariot being pulled by two white horses and holding a wreath is on this face, along with the seal of the Bank of England. The color palette is lively and rich in tones of blues, yellows and golds.

The Queen shares this note with The Duke of Wellington found on the reverse (figure 34). He too stands stoically and looking out. To the left, soldiers are in battle on horseback, shooting a cannon, and on foot, paying homage to the Duke in one of the many battles he either served in or led. The battle illustration is a beautiful engraving worthy of fine art in its detail and narrative nature. A most patriotic color scheme of red, white and blue, and accented with yellow and gray accents creates a vivid picture.



figure 32  
A decorative pattern, and little else, is seen on the reverse of an early one pound note from England.



figure 33  
Queen Elizabeth engages the user on this five pound note with her portrait being a three quarter view rather than a formal profile.



figure 34  
The Duke of Wellington, and his story, are illustrated on the reverse of this five pound British note.



A ten pound note from 1993 (figure 35) shows the Queen as she can be seen today – older, stately, experienced. It is a very formal portrait, and she is seen only from the neck up, ringed with simpler jewels. She is not wearing the formal crown jewels, but a simpler crown, which certainly holds no less respect than the formal crown jewels. The Bank of England seal remains as the only other identifiable element. The face of this note shows that England, too, must be wary of counterfeiters. With a rainbow of colors, fine line engravings, swirls of details, and holographic elements, a certain elegance seems to be missing from the earlier notes now that so much has been added to secure the document.

The reverse side of this note is no less exciting with a spectrum of colors (figure 36), but rather than seeing a war hero, culture is introduced. Charles Dickens holds space on the back of this ten pound note. He is not looking out of the page, but rather off to the left where we see a cricket match, Dingley Dell against Muggleton, being played. Sports and literature – two pastimes being represented on England’s currency.

A twenty pound British note (figure 37) resembles the ten pound note on its face. The fanciful patterns change as does the color palette, helping distinguish the denominations. The back side, too, follows what has been seen on the reverse of the ten, but this time a portrait of Sir Edward Elgar along with a view of the west face of Worcester Cathedral.



figure 35

This ten pound note from England shows a strong use of color and fine line engravings certain to dumbfound counterfeiters.



figure 36

Charles Dickens, one of England’s most noted citizens, is featured on the reverse of a ten pound note.

\$0.65



figure 37

A current twenty pound British note shows the Queen on the face and Sir Edward Elgar on the back. This series of current notes also uses color to differentiate denominations.



The Queen is also seen in many other costumes. Australia and Canada show her without crown jewels, but looking very egalitarian. This is not out of disrespect for the Queen – they love her – but love their independence even more. She is shown wearing a dark dress and a simple string of pearls looking very much like the people’s queen.

The island country of the Bahamas shows Queen Elizabeth proudly ruling the face of the one dollar note (figure 38). The rest of the face of this note is an undersea fantasy of motifs. Ribbons across the top and bottom of the face appear to be made from an eel. A coral reef with native fish swim around the left side of the note. A map of the Caribbean is behind this underwater scene and shows all the neighboring islands. A hologram of a sand dollar is a security feature and hovers above the reef.

On the reverse, we see a welcoming Bahamian police band, horns at the ready to welcome all to this friendly island (figure 39). It makes sense since so much of their economy is based on tourism. The Bahamian crest with the motto “Forward, Upward, Onward, Together” is illustrated on the right hand side complete with their national symbols of a swordfish and flamingo. Ribbons of eels and seashells adorn each corner, as well as the sand dollar hologram once again.

The Queen’s rule continues to extend onto the currency of the Caymans (figure 40).



figure 38

The Queen finds herself in an underwater fantasy on the currency of the Bahamas.

\$0.66



figure 39

A police band from the Bahamas welcomes visitors on the reverse side of the Bahamian one dollar bill.

Here again on the face, she is seen from perhaps a younger time, youthful and wearing the crown jewels. She reigns on the right side of this note. The rest of the face is filled with fish, sea shells and aquatic plants. It is a very bright note, reflective of the environment. The palette is filled with blues, purples, gold and orange.

Across the top is the official notation that this currency is from the Cayman Islands Currency Board. Below those words is the seal of the islands and the words “He Hath Founded It Upon The Seas.” A sea turtle tops the crest, another reference to the fauna of the island. A sunken treasure is even illustrated, perhaps as a historic reference to their past. The denomination of the note is shown over a form of a fish.

The reverse side of the currency is an undersea glimpse of the Cayman Islands (figure 41). The view is so lush and beautiful, as if looking at an underwater picture, if not for the words “Cayman Islands Currency Board” across the top of the note and the denomination found in the corners. Underwater life once again abounds as trigger fish, fan corals, cowry shells, eel shapes, sea cucumbers, reef walls, and the color palette, once again, reflects this environment.

The Queen is seen in many iterations across many currencies. For a country to update its monetary portraits, they either have to commission new portraits be completed or acquire a portrait to be used. Then all the production of the revised currency needs to be considered. This often happens when a living person, like the



figure 40  
A younger Queen Elizabeth is surrounded by fish and tropical motifs on the Cayman Island's one dollar bill.



figure 41  
An underwater scene fills the backside of the one dollar note from the Caymans.

Queen, is represented on currency, and perhaps this is one reason many countries use historic figures on their notes who will never age and remain noble.

Eastern Asian countries have a long-standing tradition of featuring their leaders. China shows Chairman Mao on the face side, much like American presidents as a formal, stoic, male figure with a very “Mona Lisa-like” smile, perhaps trying to appear accessible and casual (figure 42). Its currency is also very much like the back side of American notes, where they feature a landmark, typically a natural vista which very much follows a sense of their culture and regard for natural beauty. They also use important symbols of their culture as seen on the reverse side of the 1000 yen note (figure 43). Two cranes mirroring each other represent long life and happiness. The symbol is so important to Chinese culture that at a traditional Chinese wedding 1,000 origami cranes are an important element of the celebration. It also follows what many people would see as a balance – the yin and yang.

The very identity of India is held very closely to what is probably recognized as their national identity, Mahatma Gandhi. On all currency, in all denominations, his peaceful persona is featured (figure 44). Every person throughout the world recognizes Gandhi as the national representative of India, and he is not shown as anything more than what he was, a noble man, a national treasure. He was a cultural icon, a man of peace who influenced not only his homeland but people throughout the world. But one could ask if that is what India is. India is a country often thought of



figure 42  
Chairman Mao, appearing calm and engaging, is shown on the face of this note from China.



figure 43  
A one thousand yen note from Japan shows a traditional pairing of cranes representing long life and happiness.



figure 44  
What more appropriate choice than Mahatma Gandhi, man of peace, to be on the face of his beloved India's currency.

as having great poverty, dire means, homelessness, and a terribly uncivil caste system. While this is all true, the country chose to celebrate a person who crossed all these boundaries and is recognized as a cultural hero. Does his personage fairly represent the country? Probably not, but what he stands for in their mind, in their perfect society, most certainly. His image, however, is so remarkably recognizable, that whoever may come into contact with their monetary documents will easily and most assuredly know they are holding something from India.

On the far side of the spectrum is the Iraqi dinar (figure 45), that up until recently, had Sadaam Hussein ruling over the currency as he did his country. A portrait from his more youthful and powerful days looks eerily towards the west, past a monumental dam. He is dressed casually in a suit and tie with an ordinary appearance, very much resembling his public. As of October 2003, the currency has been redesigned as a result of the liberation of Iraq. The new 250 dinar shows no political figure, perhaps due to the new political rule not being in place as of yet. The new note is also brighter with its color palette and more open, optimistically foreshadowing the future of the new Iraq.

### **The Arts and Culture**

Beyond political figures, many countries recognize cultural icons, people who have “written” themselves into history. James Joyce finds himself on the face of a bill from Ireland, pre-euro. He is probably one of the world’s most celebrated authors



figure 45  
Until recently, Sadaam Hussein, was the face of Iraqi currency. The reverse used traditional motifs and patterns that would not distract from the face.



and proudly Irish. On the back of this ten pound note is a bust of Ulysses and Joyce's signature.

Another famous writer can be found on the pre-euro fifty francs note of France, Antoine de Saint-Exupéry, creator of *The Little Prince* (figure 46 and 47). And the note celebrates the prince's favorite form of adventure, an airplane. This also makes reference to Saint-Exupéry's experience of being a pilot and establishing early air mail routes through Africa and South America.

Architects are fairly well represented on currency, as well. The Swiss, known for their design, celebrate enthusiastically with Le Corbusier on the ten Swiss franc note (figure 48). The surreal quality and look of the document is said to be efficient at deterring counterfeiters. The bill is a study in line, texture, pattern and obscure elements that would make duplication a daunting task. Gustave Eiffel and his tower are honored on France's (pre-euro) two hundred francs. Although much more controlled than the design of the Swiss homage to Le Corbusier, it is no less a fanciful French document, with new views of the tower and swirling surrealistic elements.

Delacroix's majestic and bare breasted Liberty is proudly displayed on the face of the 1993 series note of one hundred francs (figure 49). She is also holding the French flag in one hand and a bayoneted rifle in the other, a detail from Delacroix's painting of her. Delacroix himself is also seen on the left side of this note in what



figure 46 and 47  
*The Little Prince* and his author, Antoine de Saint-Exupéry are celebrated on the pre-euro fifty franc note.



figure 48  
Swiss design and architecture are boldly used on this ten franc note from Switzerland where renowned architect Le Corbusier is shown.



figure 49  
Delacroix and his bare breasted Lady Liberty as seen on this early French hundred francs.

seems to be a self portrait done in his own hand.

The reverse has Delacroix once again (figure 50), although his image has been flipped as if being seen in a mirror. This time he holds a quill pen in front of a wooded glen of a rather aristocratic home. Again, the whole scene seems to be that of one painted with Delacroix's own hand. The palette, the style, the painterly look and mood of this note could almost be Delacroix's version of JSG Boggs' art.

The fifty francs note, 1992, follows closely to the design of the hundred francs note (figure 51). On the front face is Maurice Quentin de la Tour, another French artist. He, too, is flipped on the reverse side and is seen in his painterly hand in front of a cathedral. In 1994, the francs were redesigned and a very Swiss-looking note – a modern, brighter note was the result. As discussed earlier, the fifty franc note from the 1994 series shows the very popular Antoine de Saint-Exupéry, author of *The Little Prince*.

Illuminated manuscript is the best way to think of the one pound note from Ireland. Uncial\* type fills the page almost lyrically, and a large motif overprints the type along with a somber looking, anonymous woman wearing a traditional cloak (figure 52). What is more Irish than green, and that is the dominant color of the face of this bill.

\* Uncial type is an ancient type based on handwriting of Greek and Latin manuscripts from the 4th to 8th centuries A.D. They are characteristically rounded letterforms of a common x-height and adopting some cursive forms in some letters.



figure 50  
Delacroix is seen as if painted in his own hand on the reverse of an early one hundred franc note.



figure 51  
Maurice Quentin de la Tour, another French artist, is shown both face and back on this French fifty franc note.



figure 52  
An anonymous cloaked woman among celtic motifs and uncial type is shown on the face of an early one pound note from Ireland.

Turn the pound note over, and find the illuminated manuscript (figure 53), a beautiful study of space and gaelic writing declares Ireland's strong heritage. Accents of red fill spaces among the typography on nearly the entire surface. In a narrow strip, the Central Bank of Ireland and the one pound denomination are shown.



figure 53

In the style of an illuminated manuscript is the best way to describe the backside of this early Irish one pound note.

The ten pound note of Ireland, dated 1997, falls into what would appear to be a standard look of currency (figure 54), however, Ireland seems to know that it is the beautiful country that brings people to the Emerald Isle. Centered around a traditional Irish mark unfolds a view over a lake with rolling green hills and a boat on the lake. Greens and blues create that lush Irish countryside, dominating the color of the bill.



figure 54

The lush green countryside of Ireland is richly viewed on the face of this ten pound note from 1997.

The reverse of this note is a very official looking document. The crest of the Ulster Bank Limited is central to the space. Intersecting orange and pink stripes create a cross on the back and the page is framed with traditional Irish patterns with a different crest in each corner. £10 is on each side of the bank crest to finish the design.

\$0.72

The five thousand lira from Italy tells the story of Vincenzo Bellini, one of the most important composers of Italian opera in the earlier years of the 19th century (figure 55). Bellini's influence was not confined to opera; Chopin owes much to him. One of his most famous operas, perhaps "Il Pirata," is illustrated and found on the reverse.



figure 55

Famed Italian composer, Vincenzo Bellini, and one of his operas, Il Pirata are seen on the 5000 lira note of Italy.



Ootje Oxenaar, designer of the Dutch paper guilder, really understands what creating a well branded piece is all about. First and foremost, the Dutch guilders are memorable. If a successful brand is one that remains in one's mind, no one who has ever seen the Dutch guilders has forgotten them. Always keeping in mind the user, Oxenaar made sure numbers were large and legible, color palettes had great variances to help distinguish them from one another, and that images were memorable.

The blue ten guilders is to currency, what Picasso's *Guitar Player* was to his blue period, classic (figure 56). Franz Hals, a Dutch painter best known for *The Laughing Cavalier*, is casually illustrated on the front, perhaps paying honor to his famous work. The rest of the note is classic Dutch design: rhythmic patterns, well used negative space, and a bit of whimsy.

The red twenty five guilders (figure 57) is a fantasy of fans and ribbons against a grid of rectangles that all have various spatial studies within. Again, the sense of play and expression truly creates an individual document of design brilliance. There is even an Escher-esque motif on the face of the note, further exploring space on a two dimensional surface. The grid is also used for organizing elements like the President and Secretary's signatures. A large 25 is the central element on the face, allowing the denomination to clearly be seen and addresses the issue of low-vision usability.

Teofilo Braga, a Portuguese intellectual and political leader, appears on the face of



figure 56

Even as monochromatic as this ten guilder note is from the Netherlands, it is a rich and distinct note by Dutch designer Ootje Oxenaar.



figure 57

Ootje Oxenaar has fun and experiments with space and grid on this twenty-five guilder note.

the one thousand escudos note (figure 58). He was the first president of the new Republic of Portugal, 1910–11, and served again briefly in 1915. His teaching had a great effect on Portuguese intellectual life, and his writing stimulated interest in Portuguese history and literature. He is shown against a backdrop of a traditional eight pointed star motif and a clover leaf window, where a female figure with two birds stands. There is a Moorish influence in these motifs and shapes; a palette of purple, orange, and brown fades from left to right across the face.

The reverse is as interesting as the front, but has a very different feel. A vignette of the Capitel Românico is shown as a figure holding two fish and a bird, holding the tail of one of the fish (figure 59). Olive branches and what seems to be oak leaves grow out of an open text referencing back to Braga's intellectual contribution and his writings. The palette is brighter on this side of the note, picking up some blue and yellow. Similar motifs from the front are again used in the background.

The twenty Swiss franc shows Arthur Honegger on its face (figure 60). Like the ten franc note with Le Corbusier, standing the note on end will allow the viewer a better perspective. Swiss by nationality, Arthur Honegger was born and died in France. He was for a time associated with the group of Paris composers known as Les Six. Honegger was a prolific composer in many genres, writing for the theatre, concert hall, as well as for the cinema. The choice of Honegger being used on this note is unusual, due to him never really living in Switzerland. Most people who are shown



figure 58  
Portuguese intellectual and political leader,  
Teófilo Braga, is honored on the one  
thousand escudos from Portugal.



figure 59  
Braga's intellectual legacy is seen with  
several icons on the reverse of this note, all  
rising out of a text.



figure 60  
Although Swiss national Arthur Honegger  
was born and died in France, his musical  
contributions garnered him a place on the  
twenty Swiss franc note from his native  
Switzerland.

on various countries' currency have been citizens who had a more direct impact on their homeland. His tribute continues on the reverse.

Layers upon layers of musical instruments, notes, bars, and sounds create a truly lyrical page on the reverse. Look closely and piano keys create horizontal bars where "Banque Nationale Suisse" appears (figure 61). Keys on a brass horn are where the signatures of the secretary and president of the bank can be found. A textured pattern of music plays off the negative space found on the upper right hand corner of the note. As with the former Dutch guilders, this page is design; it is currency in context only.

### **Honored citizens**

The five dollar note of Australia is certainly a tribute to public servants of Australia's early days. Sir Henry Parkes, 1879 Premier, Colonial Secretary and Minister for Police, takes the featured role on this note (figure 62). Government buildings are shown in the background to honor his years of public service and protection. Australian social reformer, Helen Spence, is on the reverse (figure 63). Born in Melrose, one of eight children of a lawyer. She emigrated with her family to Adelaide, South Australia, in 1839. She became a teacher, opening her own school in 1845, before becoming Australia's first woman journalist and well known as a political campaigner and social reformer.



figure 61  
Honneger's musical legacy is demonstrated by a lush canvas of musical images on the reverse of the Swiss twenty note.



figure 62  
Public servant Sir Henry Parkes featured on the face of the Australian five dollar note is seen against a backdrop of his public career.



figure 63  
Australia pays homage to Helen Spence, social reformer, political campaigner, and Australia's first woman journalist on the reverse of the five dollar note.

The settling of the country is celebrated on Australia's ten dollar bill (figure 64). The front shows a cowboy in chase, rounding up his herd of horses. The profile of the man featured appears to be the money behind the new endeavor, a businessman for sure in his hat and business attire. A quote on the front that tells of the scene, much like the stories on early American currency, which says, "There was movement at the station, for word had passed around. That the colt from old Regret had gotten away."



figure 64  
Early settlers and the people who funded the new country of Australia are celebrated on the ten dollar note.

The backside of this note shows Mary Gilmore (figure 65). From the quote on the back, she certainly was a strong woman settler of Australia. The quote says "No foe shall gather our harvest or sit on our stockyard rail." Certainly, to be a part of her settlement, meant hard work. Also pictured is a scene of oxen-like animals pulling a load-heavy wagon that one could assume is the harvest that Mary oversaw.



figure 65  
Mary Gilmore did not suffer fools during settling the country. "No foe shall gather our harvest or sit on our stockyard rail," are her words on this note.

The clear window on this note is of a windmill found on a ranch (figure 66). Even the color palette on this note tells of open spaces, ranching and harvests in its blue, green, and golden colors.



figure 66  
Windows through the money of Australia are made possible due to their use of a plastic material versus traditional paper.

The twenty dollar bill of Australia celebrates most notably the Reibeys. Mary Reibey (figure 67), another early settler of Australia, went from indentured servant, to runaway, to horse thief, until she found herself sent off to New South Wales from England at fourteen. At seventeen, she married Thomas Reibey who went on to become a successful shipping businessman, and can be seen on the back of this note (figure 68). Mary



figure 67  
Anyone, even a horse thief, could make it in Australia and is proven by the Reibeys. Mary Reibey is shown on the face of the twenty dollar note.

proved herself a successful business person after taking over the business when Thomas died in 1811. When she passed in 1855, she was one of the wealthiest women in Australia. Mary can be seen on the face of the twenty dollar note, along with an illustration of one of their ships. A man on a camel most likely represents Thomas' shipping business that reached foreign countries like India and China. Red is a predominant color on this bill, perhaps paying tribute to their connection to Asia.



figure 68

Mary's husband Thomas was a successful shipping magnate of Australia. He established routes into India and China.

Banco Central De La Republica Dominican's ten pesos note is another formal looking document with an official leader positioned off to the right hand side of the note (figure 69). Mantias Ramon Mella is the only image present, so perhaps it is a good thing that he has presence on the page. The official bank name, serial number and denomination are all seen in various banners and motifs that have a very cultural feel. These motifs are native in style, native to the people and ancestral people of the island. The note looks very staid in a palette of black and green, very much like our former currency. In the background, there are muted tones of orange and gold.



figure 69

Mantias Ramon Mella is seen among traditional Dominican patterns and textures on this early note from the Dominican Republic.

The reverse side shows an illustration of the Altar De La Pietra (Alter of the Father) and, in the background, some of the Dominican environment, palm trees, wide open skies, and ferns (figure 70) are seen. The denomination is shown inside a large circular, traditional, Dominican medallion along with the words "diez pesos oro." The palette remains green and black with muted tones in the background, which begin to look very similar to our current currency in the States.



figure 70

Altar De La Pietra (Alter of the Father) and a tropical view of the ocean shows a glimpse of the islands of the Dominican Republic.



But being famous the world over is an obvious choice for portraiture on currency. There are equal numbers of local people who have impacted their countries just as much and have earned their own place of honor.

New Zealand used to have Queen Elizabeth on their hundred dollar note but she was replaced by Kate Sheppard, a suffragette who worked tirelessly to gain the right to vote in 1893.<sup>1</sup> Selma Lagerlof earned her place on the Swedish twenty kronor for being the first woman to win the Nobel Prize for literature in 1909.<sup>2</sup> Her most treasured work was *The Wonderful Adventures of Nils*, and Nils is featured on the back of the banknote soaring above Sweden's countryside on the back of a goose.

Maria Montessori, turn of the century Italian educator, is honored on the face of the one thousand lira note (figure 71). She is best known for her innovative teaching style of recognizing each student as an individual and emphasizing their creative potential. Her legacy lives on far past Italy with thousands of schools throughout the world. Within the deeply patterned background of the face of this bill, the silhouette of a child, Maria's life work, can be seen. The winged lion seal of Italy is also prominently featured.

The backside of this note continues to tell the story of Maria Montessori with an illustration of a teacher working with a student amongst open school books. Both sides of this note are cheerful and bright, paying homage to this innovative teacher.



figure 71  
Innovation and education are celebrated with Maria Montessori on the 1000 lira note of Italy. Her innovative "individual" teaching style has spread throughout the world.

Heroes of all kinds are celebrated on the five dollar note from New Zealand. The face shows Sir Edmund Hillary, native son, looking rugged, weathered and ever the adventurer (figure 72). Being the first to climb to the top of Mount Everest, travel across Antarctica via the South Pole, and follow the source of the Ganges into the Himalayas, he is worthy of being honored on his homeland's currency.



figure 72

National hero and native son, Sir Edmund Hillary's many conquests, first to scale Mount Everest being just one, earned him a place on New Zealand's five dollar note.

A hero of another kind is found on the reverse. The yellow-eyed penguin, native to New Zealand and on the brink of extinction appears (figure 73). Being a natural inhabitant to the country kept this species protected. Loss of natural habitat and the introduction of foreign predators has brought this animal's numbers down to under one thousand and certainly in danger of being lost forever. How fitting that these two New Zealanders share this common note.



figure 73

A no less important hero of New Zealand, the yellow eyed penguin, is a hero in its struggle to survive in its native land and is seen on the reverse of the five dollar note.

As another country of the United Kingdom, it is no surprise that the currency of Scotland has the very familiar look of notes from England (figure 74). "The Royal Bank of Scotland" is heralded in the center of the face of this one pound note. Lord Ilay, the first governor of Scotland, is seen on the right, and facing right. He looks back over his right shoulder into the page. The seal of Scotland, complete with standing horse and stag, is centered along the bottom of this note. Other subtle elements such as a silhouette of a mountain top, what appears to be a mansion – perhaps the governor's – and swirling stars, complete the note in a brightly controlled spectrum.



figure 74

The first governor of Scotland, Lord Ilay, looks confidently over his shoulder to the Bank of Scotland on this brightly colored one pound note.

When the note is turned over, the mountain top silhouette is actually that of Edinburgh Castle, the hilltop fortress that protected much of Scotland (figure 75). Along the bottom of the note is a tartan pattern used as a border flanked by repeated one pound denominations. Also centrally located along this bottom edge is a very White House-like building which is clearly a seat of government. The swirling sunburst of stars, seen on the front is here too on the reverse. Here it is seen more complete. It has a very pop art feel, as if something Peter Max may have contributed.



figure 75

Edinburgh Castle, the hilltop fortress of Scotland is seen above a government building on the reverse of this one pound note. The castle is hinted to on the face of the note as a silhouette in the lower left hand side.

### **The Face of the Country**

Many currencies simply illustrate the common person on their currency, a style especially prevalent in African countries that were once French colonies. Another unique feature of these styles of money is that more women are shown than men. Often these figures look casually illustrated, found in their daily lives, doing average activities more often than a formal portrait. Every citizen of the country can recognize the person who beautifully represents them, and everyone who sees these documents can see the friendly warm citizens of the country from which the notes originated.

Australia recognizes the native people of the island nation by showing the aborigines. On a bicentennial bill from 1988 designed by an aboriginal artist, an aboriginal youth is shown in traditional ceremonial markings. Other elements of their culture are shown as well, including a rock painting and a totem that has great importance to their culture.



Women are shown holding welcoming baskets of flowers from countries as different as Bulgaria and Laos. Flowers are commonly seen on currency as either motifs in borders or to help show the florae that are natural in the country. French Polynesia shows a profile of a local woman who is adorned with a wreath of native flowers.

Men are often illustrated on currency as active participants in routine activities. Afghan currency shows men on horseback playing a traditional game. Mongolian currencies shows men moving a yurt, a traditional nomadic home. Fiji illustrates a group of men fishing. Plenty of men farming their native fields are on currencies from Costa Rica, several African nations, Viet Nam and Bolivia. It is not too long before you can trace the history of industry as depicted on a country's currency can be traced.

A more Eastern European document, like Czechoslovakia, would be hard to find. Nearly monochromatic and utilitarian in color, this note shows a pair of farmers, a man and woman, in their best traditional work clothes nobly posing, practically in full profile (figure 76). The woman is holding a bundle of wheat under her arm, most surely from the day's harvest. They are encircled by a wreath that on one side is grain, and the other side a gear. In the lower left hand corner of this scene in the distance is a factory, billows of smoke coming from its stacks. The face of this note shows a blending of farming and industry, one corner showing what appears to be grape leaves and the opposing corner showing another gear. The only color on the



figure 76

This Czech note touches on the heritage and people of the country by presenting farmers as noble as any leader of other currencies.

face, orange, is that of the government seal.

The monochromatic image continues on the reverse with a formal border motif (figure 77). Within this border is a scene of the country with a bridge over a river. Some homes are seen on the other side of the river while a castle is seen in the distance. The Communist symbols of a hammer and a sickle intertwined with grape leaves is shown in the lower right hand corner. A crest with a lion and what appears to be the red star of Russia is shown on the right side of the note, above the denomination.

Germany has a history of being a strong, cold, and oppressive country. The Berlin Wall was a symbol of anything new and Western. Their currency reflected those attitudes, as well. A typical deutsche mark showed a figure on the front, formal and emotionless (figure 78). Formal borders restricted anything ornamental into a confined space, allowing for only the serial number to be outside its borders.

The reverse side, as illustrated on this ten deutsche mark from 1980, shows a great three mast sailing ship. Again, the ship with its fine line patterns and the denomination indicators are confined within a tightly defined border (figure 79). An official statement of the bank occupies the space that the serial number did on the front.

But as aloof as this note and many others seems to be in design, Germany has been



figure 77

A view of the Czech countryside is seen on the reverse side of this hundred korun note.



\$0.82



figure 78 and 79

An unidentified man is seen on this German ten deutsche mark. There is no waste of detail to be found on this document. A great sailing ship, one would assume with ties to the man on the front, occupies the back.

rather progressive in its pictured subjects.<sup>3</sup> Women are illustrated on half of its currency – and not political figures, cultural figures ranging from a romantic writer, poet, and a painter who has been called a precursor to Audubon.

A one hundred forint note from Hungary, just over ten years old, looks as if it were right from the late fifteenth century of American currency (figure 80). Two large cameo shapes, one with the denomination, the other a formal portrait, Kossuth Lajos, all printed in a deep red. Between the two images are the words Magyar Nemzeti Bank (Hungary National Bank), and all the official seals, signatures and numbers that make this currency.

The reverse of this note, in the same deep red, has a central image of two people in a wagon being quickly driven. The woman seems to be holding a bundle, perhaps even a child (figure 81). A black, gray, and white horse are pulling this wagon. The significance of this image is unknown. A very symmetrical motif across the top and bottom holds the denominations, one in each quadrant of the note. The overall design and style of this note is very traditional, appearing every bit an official government document.

### **Industry and technology**

Countries love to show how they have advanced the world by what they have accomplished: to keep themselves modern. Thus we see smoke stacks, oil fields,



figure 80

This very formal note from Hungary looks as if it could have been found in the archives of some bank, however, it is just ten years old.



figure 81

The image shown on the back of this note from Hungary is a wagon being drawn by three horses of different colors.

factories of up and coming countries as well as leaders in the Industrial Revolution. Many third world countries take the opportunity to show the world they can be competitive by showing their technological advances.

You would expect nothing less from Switzerland when it comes to money and their legacy of Swiss banking. But at the same time, the Swiss are known for their very controlled design. And in what looks like chaos on these bills is a very intentional design. The Swiss are keenly aware of the monumental problem of counterfeiting, and to combat this, they have designed a document that has high visual complexity.

The faces of these bill require being stood on end to read many of the images. Le Corbusier, found on the face of the ten franc note, has been discussed earlier. It is the reverse side that is the tribute to the man (figure 82). This side of the note is supposed to be a representation of his well known “Modular,” but there are so many images and treatments, layer upon layer, that make this very architectural creation look so abstract. And this, again, is an intentional choice by the designer to create a document that would be highly difficult to copy. The Le Corbusier note is probably the best known of the Swiss notes, but the same treatment is given to other denominations, as well.

### **Antiquities and artifacts**

Egyptian currencies step into another area of design themes found on currencies – antiquities. Who better than Egypt to do so, since Egypt is often seen as a birthplace



figure 82

The backside of the ten Swiss francs, the front having Le Corbusier, is a counterfeiter's nightmare. Based on Le Corbusier's Modular plan, layers of image upon image create a kaleidoscope for the viewer.

of antiquities and culture. Ramses II, the great initiator of pyramid building<sup>4</sup>, is a common image seen on various denominations. Oddly enough, it is he that is seen more often than his greatest legacy, the pyramids. The notes are a visual collection that look like a museum catalog of artifacts, beautifully arranged on the page (figure 83). Towering historic structures show on various denominations (figure 84).

It is also worth noting that the Egyptians had developed the earliest form of paper as early as 4 B.C.<sup>5</sup> Papyrus was actually long fibers from an aquatic grass woven into mats, moistened, pressed or hammered, and then dried in the sun. The result was a bright white writing surface but, unfortunately, was far too delicate to have a long lasting application such as money.

Greece, the birthplace of modern civilization, wastes no time showing its ancient history with a profile of what is believed to be Apollo on the face of this note (figure 85). It is not a portrait or an illustration, but a rendering of a sculpture showing the proud profile of the Greek god. A unique feature is that he faces to the right. A majority of portraits on currency are shown on the right facing left, but here, he faces right looking over a temple most likely built in his honor.

Taking a secondary role on this note, a more formal portrait is featured on the reverse (figure 86); a statesman by the clothing he is wearing, as well as a building shown to his right are seen. The other, rather expected feature on the reverse side is



figure 83

This Egyptian note shows what Egypt is all about, artifacts. Ramses II is also a common theme found on these currencies, for he is the initiator of pyramid building.



figure 84

Early monumental structures are often found on currency from Egypt too. These structures show the strides the Egyptians took in building and architecture.

\$0.85



figure 85

What appears to be Apollo on this Greek one hundred note faces towards the right. Again, artifacts and lost treasures are often featured on these notes from the modern birthplace of civilization.

olive branches worked and woven into the motifs and borders. A unique, controlled palette of reds, oranges and purples dominates this note.

Perhaps a kinder gentler Iraq will follow now that the currency has been redesigned in late 2003 (figure 87). No longer is the feature of the two hundred fifty dinar, Sadaam Hussein has been replaced with an artifact from science, the astrolabe. One of the earliest scientific instruments, was conceived by the Greeks, it was able to measure the time of day or night, altitude, and latitude. It was further developed by medieval Arab astronomers, who used it to help determine the time for fasting during the month of Ramadan.

The reverse side of the new two hundred fifty dinar follows suit of the Egyptian currency and celebrates an architectural monument (figure 88). In this case, The Spiral Minaret in Samarra, built in 848-849 A.D. Samarra was then the Abbasid Empire's capital city.

The new currency is telling us more about the country, and their many contributions to the world. Other images used on the redesigned currency include: a grain silo at Basrah and date palms (fifty dinar), a gold dinar coin and Al-Mustansirya University in Baghdad (one thousand dinar), the Ali Beg gully and its 800m waterfall and desert fortress of Al-Ukhetter, Hejira (five thousand dinar), Abu Ali Hasan Ibn al-Haitham, said to have 'invented' the camera obscura and Hadba Minaret, at the Great Nurid Mosque, Mosul (ten thousand dinar) and a Kurdish farmer holding a sheaf of wheat and King Hammurabi (twenty-five thousand dinar).



figure 86

The reverse of this greek note shows a typical statesman, though still facing to the right. It is worth noting the olive branches used in the border motifs.



figure 87

The new dinars of Iraq no longer show leaders, rather they show various elements that have helped better the world, in this case an early scientific instrument called an astrolabe.



figure 88

The reverse side of many of the newly designed Iraqi currencies show architectural sites of the country. Here, the Spiral of Minaret in Samarra.



## Flora and Fauna

The Dutch fifty guilder note, probably the most famous of the notes, is often called the sunflower. A brilliant, bright page in yellow and orange shows a very Van Gogh-like sunflower set off to the right – or the bottom depending on how the note is viewed (figure 89). The typography for this note runs horizontally up the right edge, which asks to be turned so as to be seen standing on edge, which would then make the sunflower look like a rising sun. The bee that is resting within the sunflower is also used as the watermark for this note. A single orange 50 is set off to the left above where the watermark appears.

The reverse side brings into view the Dutch countryside (figure 90). Through an octagonal window, fields of sunflowers of varying styles and techniques are illustrated. A map of what seems to be Amsterdam is superimposed on the page. The octagon itself is broken down into six segments and Oxenaar takes advantage of each section to show something a little different each time. Pattern, texture and orange to yellow gradients adorn the borders and spaces around this central design.

Hong Kong, even with its long standing relationship with the British monarchy, does not show the Queen as one might expect. No longer under British rule, it is not entitled to show British symbolism. But the country always maintained a separate identity by showing very non-British elements on its currency.



figure 89

One of the most popular foreign currencies is the fifty guilder note of the Netherlands. Known as the sunflower note, its explosion of color makes it easily identifiable amongst the rest of the Dutch currency.



figure 90

The sunflowers reverse side takes the viewer on a side trip through the Dutch countryside where the flower fields abound.

The notes of Hong Kong are a classic model of template design (figure 91). Elements are consistent one note to the next. The color palette and specific content changes from one note to the next, but their position, treatment, and size all remain constant.

A regal profile of a lion, very portrait like, appears on the left hand side of the face. The face looks over a view of the Hong Kong skyline from the harbor placed in the center of the note. Creating a border on the right hand edge is a traditional motif often found in traditional textiles and art. On the twenty is a cherry blossom pattern; and on the hundred a geometric pattern appears. The palette changes from one denomination to the next, thus creating a very individual appearance. Lower denominations have a cruder, more utilitarian palette of browns, grays, with some brightness in the interior. The hundred note is bright red and pink.

On the reverse, like China, they very prominently feature their national symbol of a lion. However, on the back these lions seem to be guarding a view into the country on the back illustrating either an architectural landmark or a view of their culture. The lion on the left seems to be the aggressive one with its mouth open in a roar. The lion on the right is calmer, balancing its partner on the left.

Ghandi has been discussed on the face of the rupees. It is the back side of these notes from India that set them apart from many other currencies. It provides a complete



\$0.88

figure 91

Classic template design of these notes from Hong Kong vary little from denomination to denomination. You have to look closely to see the view on the right side of the reverse is essentially the only element that changes. The color palette, note to note, is the greatest element to differentiate.



glimpse into both the flora and fauna of this magnificent, culturally rich country.

Turn the ten rupees note to its back side, and you are engaged by three of the country's best known residents: the tiger, rhino and elephant (figure 92). Among a wonderfully carved motif the elephant looks to the right, rhino to the left and the tiger stares directly at you. Intricate motifs of lotus leaves and flowers, patterns and textures surround the area where you see the watermark of Ghandi. A color palette that seems to be drawn from the wonderful spices of the country fill this document with cardamom, orange, ochre and deep warm earthtones.

The one hundred rupee's reverse gives us a glimpse into the vast landscape of the country (figure 93), a wonderful vista into the mountains of the north. The view is framed so that it appears as though looking out a window of an Indian room. Blues, purples, and greens fill the palette and complete the spectrum of color that is India.



figure 92

The featured animals here on the back of the ten rupees note, the rhino, Asian tiger and Indian elephant, are long revered in the Indian culture. It is surprising how the sacred cow is not shown on any of their currencies.



figure 93

India truly respects their environment by showing beautiful views of their landscape. Shown here is a mountain scape on the back side of the hundred rupees note.

## **CONCLUSION**

Ace, beans, bill, budget, bullion, buyoff, cabbage, capital, means, mintage, money, moolah, nest egg, note, nut, one-spot, pay, payola, payment, perk, resources, reward, revenue, riches, enticement, envelope, goody, graft, gratuity, gravy, grease, green, shekel, skin, smacker, green stuff, greenback, Almighty Dollar, respite, tab, trust, cold cash, color, corn, dead president, jangle, lettuce, line, mint, peanuts, poke, lira, yen, guilder, tick, kronor, forint, pound, franc, sucre, cedis, rupee, shilling, dinar, cart-wheel, cash, certificate, change, wherewithal, year, plastic, chips, clam, coin, coinage, collateral, compensation, loonie, lot, loot, lucre, lure, mazuma, lucre, finances, contract, copper, corrupt money, smackeroo, small change, sop, specie, stakes, stock, corrupting gift, cucumber, currency, check, blackmail, bone, boodle, bread, bucks, chicamin, chicken feed, property, meter money, protection, ready assets, refund, remuneration, reserve, kitty, lagniappe, legal tender, long green, fish, fluid assets, banknote, bankroll, hard cash, ice, incentive, inducement, influence, peddling, investment, iron man, jack, roll, salary, fortune, fringe benefit, frog, present, price, principal, fund, funds, gift, gold, bait, kickback, pesos, piaster, riyal, rupiah, kina, kwacha, euro, bank, allurement, backing, fee, filthy piece, pledge, pork, proceeds, profits, savings, scratch, security, silver, single, store, stuff, sugar, supply, sweetener, sweetening, take, tip, treasure, wad, wage, wampum, wealth, dinero, dollars, dough, ducats, earnings, cheddar. Whatever it is called or however it is referred, it all is the same – currency. And every country has its unique take on it.

I started this journey as a kid wondering about these funny pieces of paper, and I still continue to wonder. Having seen so many currencies from all over the world, the one thing they all have in common is their intended use. Even when the imagery is common, they have their own unique twist. How intentional these choices are is not truly known.

A very common element of all currency design is making sure that the currency is secure and unable to be replicated by anyone other than the issuing country. How will this impact the future of currency design? Will we still be using traditional media of paper? Traditional printing methods? The United States is always watching for best practices in redesigning their currency and protecting it from being the most commonly counterfeited currency. But are we changing it enough?

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In a recent article called, “The Disappearing Dollar?”, writer Jim Louderback looks at paper currency and questions its usefulness. In this article, he speaks of how in today’s world, we do not really need cash. Automatic bill payment, direct deposits, and debit cards are moving us away from actually using paper money.<sup>1</sup>

The Internet took this “cashless” model even further with companies like DigiCash, Beanz, and Flooz. Buy an amount of Flooz, virtual currency, with a credit card and then use it at other affiliated on-line stores. But these Internet ventures became victim of electronic counterfeiters and fraud, just like any other currency. But the Internet is

still an interesting model to look at when thinking about the future of currency.

A University of Texas Study titled “E-Commerce Surging,” October 1999, confirmed what many were speculating – that the Internet is a huge force to deal with when doing business. Some findings in this study were:

- Revenues projected for Internet-related businesses will rise by 68 percent this year (1999), to more than a half-trillion dollars.<sup>2</sup>
- The increase over 1998 revenues of \$301 billion to projected revenues for 1999 of \$507 billion means the Internet Economy now outpaces such long-entrenched American industries as telecommunications, airlines and automobiles.<sup>3</sup>
- The Internet Economy, as measured by in-depth surveys of 3,400 companies with Internet-related businesses, grew from \$64 billion in the first quarter of 1998 to \$108 billion in the first quarter of 1999.<sup>4</sup>
- E-commerce – sales made directly over the Internet – led the sector, jumping 127 percent from the first quarter of 1998 to the first quarter of 1999.<sup>5</sup>

All the sales that were made over the Internet never used cash. They were faceless and cashless transactions. Paid with a credit card, the credit card company makes a deposit into the company’s account, and the paycheck is directly deposited by an employer into a checking account, pay the credit card company with a check from the

bank. Where is the cash? Is paper currency as we know it becoming an outdated form?

Technology followed this thinking with the invention of Smart Cards. Smart Cards are a credit card like device that have a tiny computer chip in them that hold cash. When the card empties, you go to an ATM and refill with a set amount. They differ from debit cards which are tied directly to a bank account providing an unlimited supply as long as there is cash in the account. The Smart Card is more like having a set amount of cash in your pocket. Like currency, these Smart Cards are anonymous, however, they lack the convenience of paper currency. Even though more and more people do not use paper currency, that is not a reason to forgo the long history of it. Louderbeck, once again, speaks to the advantage of currency. He says that one advantage of paper money is that it is anonymous.<sup>6</sup>

**\$0.93**

Technology, once again, is constantly eroding our anonymity and, one could even say, our right to privacy. Any credit card company can trace our whereabouts, spending habits, and all sorts of personal information. It could be said a little bit of our freedom is lost every time we use a credit card. Paper currency, as far back as the earliest documents created by Benjamin Franklin, celebrate our freedom. And not just our freedom as a country, but what it allows us to do as citizens of our country. It gives us a personality to the world, the American Dream. Could the most recent redesign of our currency have had greater changes? Should it have been more representational of our nation? How about celebrating accomplishments in our history?

Certainly, but that was not a part of the plan. The redesign was to insure the security of our currency as it has been in many iterations of the past.

As was with the last election and the design of the “butterfly” ballot, which many say corrupted the election process and its validity, the AIGA (American Institute of Graphic Arts) formed Design for Democracy, a group of professional and student designers, that created, “Election Design: Models for Improvement,” which looks into the design problems of the ballot. The results, in book form, will be presented as a how-to-guide for election officials in all states and counties, state legislators, secretaries of state and election directors to better design a document that can be used by all people. Perhaps that is what needs to be done in future designs of currency. Talk to people, learn from the past, work with professionals who solve these problems, and observe what others are doing to fight common problems. Then create a document that truly represents a country’s brand.

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Keeping a country’s currency design current is a rather monumental undertaking. Many countries simply cannot afford to revamp their money. Countries like Hungary and Czechoslovakia’s currencies remain looking ancient as they did when they were first designed. Surely not a current or accurate image of who they are today.

The United States falls somewhere in between being the worst and the best. Our currency has remained essentially unchanged in images or color since the late 1920’s.

The recent redesigns have incorporated very modern security features as well as unique printing techniques as demonstrated by the color shifting inks developed. Incorporating new color backgrounds have been adopted as many foreign countries have used for a long time.

One may ask which country's currency is doing the best at branding themselves through their currency. Australia certainly demonstrates thoughtful design of their country in the imagery of both men and women that helped build their country. They have been innovative and a leader in using new materials and techniques in securing their documents. Many of these materials and techniques have since been adopted by other countries. Switzerland has designed their currencies with such detail that the simple process of printing is a daunting task. And the Dutch, before their adoption of the Euro, truly understood that a document can be secure, representational, and designed beautifully by employing professional designers to create their notes.

## END NOTES

### INTRODUCTION

<sup>1</sup> Jason Goodwin, *Greenback*, (Henry Holy & Company, 2003), cover.

### BRANDING

<sup>1</sup> Alina Wheeler, *Designing Brand Identity*, (John Wiley & Sons, Inc., 2003), 1.

<sup>2</sup> Wheeler, 2.

### HISTORY

<sup>1</sup> Goodwin, 9.

<sup>2</sup> Glyn Davies, *A History of Money*, (University of Wales Press, 2002), 13.

<sup>3</sup> Money in North American History, July 10, 2003

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<<http://ex.ac.uk/~RDavies/arian/northamerica.html>>

<sup>4</sup> Davies, 458.

<sup>5</sup> Money in North American History, July 10, 2003

<<http://ex.ac.uk/~RDavies/arian/northamerica.html>>

<sup>6</sup> Money in North American History, May 12, 2003

<<http://ex.ac.uk/~RDavies/arian/northamerica.html>>

<sup>7</sup> David Standish, *The Art of Money*, (San Francisco: Chronicle Books, 2000), 18.

<sup>8</sup> Goodwin, 64.

<sup>9</sup> "The Secrets of Making Money," NOVA, transcript, 22 October, 1996



## **WORDS ON PAPER**

<sup>1</sup> Goodwin, 66.

<sup>2</sup> Goodwin, 121.

## **EURO**

<sup>1</sup> Chabot, 4.

<sup>2</sup> Robert Kalina: Der Euromacher, July 14, 2003

<<http://www.apple.com/de/creative/euro/>>

<sup>3</sup> Robert Kalina

<sup>4</sup> Chabot, 10.

<sup>5</sup> Chabot, 14.

<sup>6</sup> Chabot, 15.

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## **THE UNITED STATE OF THE DOLLAR**

<sup>1</sup> NOVA.

<sup>2</sup> NOVA.

<sup>3</sup> The New Color of Money (Washington D.C. 2003).

<sup>4</sup> US Treasury Department (2004) <http://www.ustreas.gov/offices/domestic-finance/acd/design/>.

<sup>5</sup> Senate Banking Committee - Documents Online - 106th Congress (2003)  
<http://banking.senate.gov/docs/reports/dollar.htm>.

<sup>6</sup> JSG Boggs Studio (2003) <http://www.jsgboggs.com/>.

<sup>7</sup> Steven Gagnon - Retrospective: The Official Site (2004)

<http://www.stevengagnon.com/>. March 29, 2004

<sup>8</sup> Gagnon.

<sup>9</sup> Cat Chow Wearable Art (2004) <http://www.cat-chow.com/>

## **THE MAKING OF MONEY**

### **Paper**

<sup>1</sup> Standish, 104.

<sup>2</sup> Money in North American History.

<sup>3</sup> NOVA.

### **Watermarks**

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<sup>4</sup> NOVA Online: Secrets of Making Money, Program Update, August 2002

<<http://www.pbs.org/wgbh/nova/moolah/update.html>>

<sup>5</sup> Traci Carl, "Mexico Moves to Plastic Peso," Chicago Sun-Times September 11, 2002.

### **Words on Paper**

<sup>6</sup> "Fresh Mint." I.D. the International Design Magazine March/April 1999: 68.

## **PRINTING**

<sup>1</sup> Michael H. Bruno, *Pocket Pal: Graphic Arts Production Handbook* (International Paper Company, 2000), 141.

## **COUNTERFEITING**

<sup>1</sup> Lisa Chambers and Annabel Vered, "10 Things You Didn't Know About The Amazing Race," TV Guide June 28, 2003: 29.

<sup>2</sup> NOVA.

<sup>3</sup> NOVA.

<sup>4</sup> NOVA.

<sup>5</sup> NOVA.

## **DESIGN**

### **Honored citizens**

<sup>1</sup> Standish, 41.

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<sup>2</sup> Standish, 41.

### **The face of the country**

<sup>3</sup> Standish, 40.

### **Antiquities and artifacts**

<sup>4</sup> Standish, 92.

<sup>5</sup> Standish, 21.

## **CONCLUSION**

<sup>1</sup> Jim Louderback, "The Disappearing Dollar?" USA Weekend January 31, 2003, 4.

<sup>2</sup> Research Trends: E-Commerce, Web Design and Development (2004)

*<http://www.niacc.cc.ia.us/admin/academic/scroll/trends.html>*

<sup>3</sup> Research Trends

<sup>4</sup> Research Trends

<sup>5</sup> Research Trends

<sup>6</sup> Louderback, 4.

## **BIBLIOGRAPHY**

Bruno, Michael H. *Pocket Pal: Graphic Arts Production Handbook* New York: International Paper Company, 2000.

Carl, Traci "Mexico Moves to Plastic Peso," Chicago Sun-Times September 11, 2002.

Cat Chow Wearable Art January 25, 2004 <<http://www.cat-chow.com/>>.

Chabot, Christian N. *Understanding the Euro*, New York: McGraw-Hill, 1999.

Chambers, Lisa and Annabel Vered, "10 Things You Didn't Know About The Amazing Race," TV Guide June 28, 2003.

Davies, Glyn *A History of Money*, (University of Wales Press, 2002.

"Fresh Mint." I.D. the International Design Magazine March/April 1999.

Goodwin, Jason *Greenback*, New York: Henry Holy & Company, 2003.

JSG Boggs Studio August 21, 2003 <<http://www.jsgboggs.com/>>.

Money in North American History, July 10, 2003

<<http://ex.ac.uk/~RDavies/arian/northamerica.html>>.

Robert Kalina: Der Euromacher, July 14, 2003

<<http://www.apple.com/de/creative/euro/>>.

Standish, David *The Art of Money*, San Francisco: Chronicle Books, 2000.

Steven Gagnon - Retrospective: The Official Site. March 29, 2004. February 8, 2004  
<http://www.stevengagnon.com/>.

Stein, Robert, comp. Senate Banking Committee - Documents Online. 106th Congress, Subcommittee on Economic Policy, U.S. Senate Committee on Banking, Housing and Urban Affairs, Washington, 2003  
<<http://banking.senate.gov/docs/reports/dollar.htm>>.

"The Secrets of Making Money," NOVA, WTTW, Chicago. 22 October, 1996.

United States. Department of the Treasury. The New Color of Money. Washington D.C. 2003.

\$1.02

US Treasury Department March 18, 2004 <<http://www.ustreas.gov/offices/domestic-finance/acd/design/>>.

Wheeler, Alina *Designing Brand Identity*, Hoboken, New Jersey: John Wiley & Sons, Inc., 2003.

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