# THE PAST, PRESENT AND FUTURE OF MONEY



## GOLD TO GIGABYTES

### THE PAST, PRESENT AND FUTURE OF MONEY

An exhibit in the UC Irvine Langson Library Muriel Ansley Reynolds Exhibit Gallery

October 2012 - April 2013

Featuring a talk by the Curator of Modern Money, The British Museum.

Catherine Eagleton

With remarks by **Bill Maurer**UCI Professor of Anthropology and Law,
Director of the Institute
for Money, Technology,
and Financial Inclusion (IMTFI)

Welcome to the UC Irvine Libraries' fall 2012 exhibit, Gold to Gigabytes: The Past, Present and Future of Money. This exciting exhibit explores the anthropology of money by tracing the evolution of currency from ancient beginnings to its present state and broadly illuminating new trends in the exchange of money and alternative currencies. Materials on display are from the Libraries' collections and from UCI's Institute for Money, Technology and Financial Inclusion (IMTFI) in the School of Social Sciences. The exhibit is curated by staff in the UCI Libraries and IMTFI.

We are delighted to have Catherine Eagleton, Curator of Modern Money at the British Museum, as the featured speaker for our exhibit opening event on October 5.

I hope you enjoy the exhibit and return to view others in the future.

Lorelei Tanji University Librarian

#### Gold to Gigabytes:

#### The Past, Present and Future of Money

Any item can be invested with monetary properties. Some societies used shells or beads for exchanges to signify the making or breaking of important relationships. Human societies in their search for mediums of exchange have transitioned from coins to paper currencies to objects that serve as surrogates for money. Credit cards and automation of financial transactions through electronic fund transfers and online accounts have helped usher in what many believe to be a "cashless society."

Money does not have to come from the state or always be used for commerce. Throughout history, people have created other, non-state alternative currencies. Some do so in opposition to the state, or to assert their own political aspirations. In many societies, special "social currencies" are used to make and to mark important relationships or events. Money can become lucky tokens, offerings, a source of safety, or a symbol of stability. Money can also inspire artists, poets, and musicians to illustrate the complex relationships we have with it, with each other, and with the very idea of value itself.

The IMTFI is a clearinghouse for anthropological research on mobile money and poverty alleviation worldwide. One area of research going to is where banks are few and far between; there the mobile phone is becoming a financial tool. "Mobile money" services permit cell phone users to send small amounts of money via text message to their friends and relatives. There are over 90 mobile money services in the world today, mainly in emerging economies.

- 1. **Money: A History**. Catherine Eagleton and Jonathan Williams. London: British Museum Press, 2007.
- 2. **A Survey of Primitive Money: The Beginning of Currency**. A. Hingston Quiggin. London: Methuen & Co. Ltd., 1949.
- 3. **Cowrie shells**. Nigeria. c. 19th CE.

"Cut back" cowrie shell, of two species (Cyprea moneta (money cowry) and Cyprea annulus (ring cowry)), imported into Africa by European traders. The cowrie has been used as a medium of payment from China to India to the Americas.

4. Changing forms of money in Papua New Guinea.

Used for payments in the Papua New Guinea (PNG) highlands from the early to middle 20th century, the kina shell adorns the Papua New Guinea banknote and gives its name to the unit of currency.

- a. Kina shell necklace. Papua New Guinea. c. 1947.
- b. **PNG five kina note**. Papua New Guinea.

- 5. **Mints and Money in Medieval England**. Martin Allen. Cambridge: Cambridge University Press, 2012.
- 6. **A Path to the Next Generation of U.S. Banknotes: Keeping Them Real**. Committee on Technologies to Deter Currency Counterfeiting, Board on Manufacturing and Engineering Design, Division on Engineering and Physical Sciences, National Research Council of the National Academies, 2007.
- 7. **United States \$100 bill anti-counterfeiting features**. The Latest in U.S. Currency Design. U.S. Department of the Treasury, 2010. www.newmoney.gov

As paper currencies have evolved so has the ability to duplicate them. Governments actively work to redesign currencies to be trustworthy.

8. **Lydian siglos**. c.450-330 BCE. King Croesus of ancient Lydia has been credited with issuing the first standardized coins.

9. Greek coins through the years.

The Athenian Tetradrachm was one of the largest issue of coins of any Greek city-state. The contemporary Greek issue of the Euro incorporates the owl design from the older coin.

- a. Athenian Tetradrachm. Greece. c. 454-404 BCE.
- b. Euro Coin with Greek owl. Greece. 2002.
- 10. **Cuneiform tablet**. Reproduction. Larsa, Sumer. 18th c. BCE.

Before there were coins, there were receipts. This is a reproduction of an ancient Sumerian tablet recording a grain transaction. The tablet was encased in a clay envelope with an identical inscription. The envelope would be broken in the event of a dispute, revealing the original text within.

11. "Coins" as everyday objects.

Ancient money objects often represented tools or other useful objects.

- a. Chinese "spade" coin. China. c. 600-300 BC.
- b. Chinese round coins. China. c. 960-1127 AD.

- c. **Chinese "knife" money**. China. c. 400 BC. Chou Dynasty.
- d. Images of early coins. *Numismatics*. Philip Grierson. New York, Oxford Press, 1975.
- e. **Bronze canoe money**. Thailand, c.1700-1800 AD.

#### 12. **Paper money**.

a. Bank of de Soto Banknote. Nebraska. 1859.

Before the consolidation of one national currency in the US, banks issued their own notes backed by their gold or other commodity reserves. These notes were uninsured: there was no lender of last resort or true finality of payment.

- b. Australian 10 dollar note. Australia.
- c. Bank of Jamaica 50 dollar note. Jamaica.

#### 13. **Checks**.

Bank checks, like the Sumerian cuneiform receipt, are more than a means of payment--they are also a record of exchange between businesses.

- a. **Wells Fargo Check** (reproduction). San Francisco, CA. 1864 (2012).
- b. Chemical National Bank check. New York, NY. 1919.
- 14. **Bank of Springer receipt**. New Mexico, NM. 1906.

This receipt from Bank of Springer notes the different forms of money the bank would accept on deposit.

- 15. **Credit Card Use in the United States**. Lewis Mandell. Ann Arbor, Institute for Social Research: University of Michigan, 1972.
- 16. **UCredit for Women: Why Is It So Important?** Rekha Mehra, Annelies Drost-Maasry, and Ruba Rahman. Santo Domingo, Dominican Republic: INSTRAW, International Research and Training Institute for the Advancement of Women, 1995.
- 17. **Women and credit cartoon**. R. D. Norton. "2: Temptations: Credit Cards, Debit Cards, ATMs." *Economic Education Bulletin* 49.7 (2009): 15-20.
- 18. **Carte Blanche credit card specimens**. United States. 1960s.

Early charge cards tried to associate these objects with being "modern." These

specimens feature "His and Hers" styling, as well as the surname.

#### 19. Charge plate credit cards.

Charga-Plate, developed in 1928, was an early predecessor to the credit card and used in the U.S. from the 1930s to the late 1950s.

- a. Bullock's Charga-Plate Advertisement. Los Angeles Times. 1936.
- b. John Wanamaker charge plate credit card. 1958.
- c. The F & R Lazarus & Co. charge plate credit card.
  - d. Gimbel Brothers New York charge plate credit card.
- 20. **The Man from The Diner's Club**. Ampersand and Dena Productions and Columbia Pictures, 1963.

"The Man From The Diner's Club" promoted the promise and peril of non-cash transactions. Danny Kaye plays a new employee who mistakenly issues a card to a mobster and must retrieve it. Mayhem ensues.

- a. "Cash died today." from "The Man from the Diner's Club." 1963.
- b. Still from "The Man from the Diner's Club." 1963.
- c. Still from "The Man from the Diner's Club." 1963.
- 21. **Digital Money: The New Era of Internet Commerce**. Daniel C. Lynch and Leslie Lundquist. New York: Wiley, 1996.
- 22. **Computer Money: A Systematic Overview of Electronic Payment Systems**. Andreas Furche and Graham Wrightson. Heidelberg: dpunkt, Verlag für digitale Technologie, 1996.
- 23. **Paying with Plastic: The Digital Revolution in Buying and Borrowing**. David S. Evans and Richard Schmalensee. Cambridge, MA: MIT Press, 1999.
- 24. "Our Cashless FUTURE." Allen H. Kupetz. Futurist 41.3 (2007): 36-40.
- 25. **"KartUkhuwah"** brochure. Makassar, Indonesia. 2000.

Islam does not permit interest or usury. Though interpretations of the prohibition vary, banks across the Muslim world offer products like this savings card that can be used like payment cards but also help manage your money to ensure obligatory charity donations.

26. **Fractional currency 25 cent bill**. United States. First issue, 1862-63.

Fractional notes were issued by the US Treasury during and after the Civil War as people hoarded metal coins. People were already using postage stamps instead of coins due to the shortage of the latter. This note uses images of stamps to get across the message of the note's worth -- a step in the move towards money linked to other such representations, and a step toward the abstraction and dematerialization of money itself.

27. **Silver certificate**. United States. 1891.

Notes backed by silver or gold helped preserve the idea that government-issued paper currency -- still controversial after the US Civil War -- had "real" value behind it.

28. Fort Worth Tire Company credit card. 1940.

The first credit cards were issued by gasoline and automobile businesses.

- 29. Farrington credit card imprinter #1500. c. 1960s.
- 30. Diner's Club Card Specimen. c. 1950.
- 31. **Diner's Club board game**. United States. 1961.

  Just as ancient coins were a form of mass media that advertised the sovereignty of the king, toys and games helped generalize and promote new payment technologies.
- 32. **Money: Understanding and Creating Alternatives to Legal Tender**. Thomas H. Greco. White River Junction, Vt.: Chelsea Green, 2001.
- 33. **Local Money: How to Make It Happen in Your Community**. Peter North. Totnes: Transition Books, 2010.
- 34. Ithaca hours.

Ithaca HOURS are a form of alternative currency that equates one HOUR to one hour of labor time by an individual, regardless of skill level.

- a. **Hour Town**. Issue 46, 1999. Ithaca, NY. 1999. The HOUR Town Newsletter in Ithaca, NY, originally listed all the merchants and individuals that accepted Ithaca HOURS as full or partial payment for goods and services. An online directory is now available at www.ithacahours.com.
- b. Ithaca Hours eighth hour note. Ithaca, NY. 1997.

- c. Ithaca Hours quarter hour note. Ithaca, NY. 2001.
- d. **Ithaca Hours one hour note.** Ithaca, NY.1994.

#### 35. Other alternative currencies.

Community leaders and organizations sometimes create alternative currencies to "keep money local." While some of these currencies can be exchanged for state-issued currency, they are accepted only by local businesses, limiting the circulation of money to the community of origin.

- a. Baltimore BNote. donated by Jane Guyer. Baltimore, United States. 2011.
- b. BancoBen note. donated by Kurt von Mettenheim, Sao Paolo, Brazil, 2011.
- c. One Berkshare note. Great Barrington, MA. 2006.

#### 36. Money and sovereignty.

Money signifies sovereignty. One of the first acts of a rebellious province seeking autonomy is to make money, either by issuing wholly new currency or by appropriating the old.

- a. Confederate States of America \$10 bill. Richmond, VA. 1864.
- b. Japanese Invasion Money: 10 rupiah note. Indonesia. 1943-44.

From the Japanese occupation of Indonesia, but then overstamped Republik Islam Indonesia, and signed.

- 37. **Fringe Banking: Check-cashing Outlets, Pawnshops, and the Poor**. John P. Caskey. New York: Russell Sage Foundation, 1994.
- 38. **London Money Shops.** Photograph by Diane Patrice. 2012.

London, 21st April 2012. Artist Diane Patrice photographed "fringe banking" services within a one mile radius of her house to create this collage, which now hangs in the British Museum.

- 39. **Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams**. David Graeber. New York, Palgrave, 2001.
- 40. **Arguing Anthropology: An Introduction to Critical Theories of the Gift**. Karen Sykes. New York: Routledge, 2005.

#### 41. **Kissi pennies**. Sierra Leone or Liberia. Early 20th century.

Social currencies like these "kissi pennies" are used by members of the Kissi, Kpelle, Loma and Bande tribes of West Africa to mark and mend important social relationships. Kissi pennies functioned as a general purpose currency and were believed to carry a soul -- perhaps as a commentary on the 'magic' of money in equating all things according to one scale of value.

#### 42. **Kualia shell disc currency**. Torres Strait Islands. c. 1900.

This shell disk is probably made from Conus litteratus and originally formed part of a bridal necklace in the Torres Strait islands. Such objects could be part of the bride-price: wealth objects given by elders to the couple on marriage.

#### 43. African currency objects, 19th c.

#### a., b. Birmingham manillas.

Manufactured in England, these copper objects were exchanged for slaves, gold, ivory and other commodities during the slave trade. Nigeria.

#### c. Bassa anklet. Liberia.

#### 44. Heifer International brochure. 2011.

Some humanitarian organizations donate livestock, not money. A goat can be a store of value and a good investment in countries where the value of money is unstable.45.

#### 45. **Bank Americard credit card.** Georgia. 1974.

Georgia BankAmericard Credit Card. Note the bank branding of the card.

#### 46. Addressograph Bartizan NewBold credit card imprinter.

Ubiquitous in retail locations until very recently, such credit card imprinters come in many varieties.

#### 47. National Business Systems Transaction Terminal. Canada. 1980s.

As with credit cards, early magnetic stripe reader terminals indicated the name of the bank through which the transactions were processed.

#### 48. Mall Madness board game. 1996.

In Mall Madness, the player must use a credit card to make purchases. The board game illustrates the promotion of new payment technologies to young people in the 1990s.

#### 49. **Prepaid phone cards**.

In many parts of the world, including California, prepaid airtime credits are an important part of everyday financial activity.

- a. International Prepaid Phone Card. Long Beach, CA. 2012.
- b. **Greek phone cards**. Greece. 2012. Donated by Nick Seaver.

#### 50. Coffee loyalty cards.

Loyalty cards range from low to high tech. Coffee stamp cards are an excellent example of a combination loyalty program and alternative currency, especially when the rules regarding their redemption are flexible. For example, when a card is filled in, do you get one free small coffee or one free drink of any size or flavor?

- a. **EcoGrounds stamp coffee card**. Irvine, CA. 2011.
- b. Portfolio coffee stamp card. Long Beach, CA. 2011.

#### 51. "All About Fish" loyalty card. Long Beach, CA. 2009.

Merchants can participate in loyalty programs, rewarding customers with points that can be converted into merchandise. But what happens to "dead" loyalty card value -- when a merchant, like this one, goes out of business?

#### 52. Oyster Card and case. London, 2012.

The Queen's Jubilee issue, London's multimodal transport card.

#### 53. **Tokens**. Various, 20th c.

Privately issued tokens serve exchange, gaming, as well as access functions.

- a. American Eagle "No Cash Value" token.
- b. Nik-o-Lok Restroom token.
- c. Pachinko token.

54. The Value of Things. Neil Cummings and Marysia Lewandowska. Basel: August, 2000.

#### 55. **Ritual money**.

Money can also have special or sacred properties. All of these are intended to be part of special sacrifices.

a. "Eight-Auspiciousness Gold Coin." Singapore. 2011.

A coin purchased to serve as an offering at the Buddha Tooth Relic Temple in Singapore.

b. Joss Paper "Gold" Bars and "Hell Bank Note," 10,000. Irvine CA. 2002.

Chinese hell or ghost money. Cash, "gold," or other representations of valuable goods are burned at temples as an offering for dead ancestors to use on the way to the afterlife.

c. **Indian coins marked with red vermillion for Diwali**. Photo by Parul Aggarwal. Irvine, CA. 2004.

#### 56. Money and rites of passage.

Money can be used to mark a transition in life. As a person moves it is wished that prosperity will follow.

a. Money lei. Newport Beach, CA. 2012.

At UC Irvine, students often wear money leis or garlands at graduation. This is a new campus practice based on longstanding Pacific Islander traditions.

b. **Image of Imam Zamin**. Photo by Tasneem Siddiqui. 2005.

Imam Zamin is a tradition from central and south Asia involving the tying of a ribbon or embroidered pocket onto a traveler, hiding money inside to be used when the travel reaches her destination. The practice endures on the UC Irvine campus.

c. **Yedan Pojagi**. Korea.

In Korean, Yedan means wedding gifts and Pojagi means wrapping clothes. As part of wedding celebrations, the bride's family will present money to the groom's family wrapped in a sheath like this.

#### 57. Money, religion, and politics.

Money or its container can be a "special" object. By marking money with a phrase or keeping it "close to Jesus" a person hopes to strengthen the association between the two things.

a. Blue Q Looking Good for Jesus Change Purse. 2011.

From the sublime to the ironic, money and morality frequently intertwine.

b. American one dollar note with marginal notation. Santa Ana, CA. 2002.

People write prayers on banknotes, asking the saints for prosperity or protection.

c. Iranian twenty thousand rial note with marginalia. Iran. 2009.

A bill that circulated during the controversial election in 1388 (2009). Marginalia reads: "death to the crippled donkey Khamenei" -- a reference to the hand injured in an assassination attempt in 1981. Donated by Elham Mireshghi.

#### 58. **Money in music.**

Money, or the lack of, inspires musicians to reflect on the eternal guest.

- a. **If you ain't got the do-re-me: Songs of rags and riches**. Smithsonian Folkways, 2007.
- b. "If I had a million dollars." Speckled Red. The Barrelhouse Blues of Speckled Red, Folkways 3555,1961.
- c. Million dollar bill "Millennium Note." c.1999.

A novelty bill carrying a number of political messages.

59. **Sueño** (Dream). Máximo González. In *Poetics of the Handmade*. Alma Ruiz, ed. Los Angeles: Museum of Contemporary Art, 2007.

Artist Máximo González uses decommissioned Mexican pesos in his collages and other work, reflecting on the fate of material money and the projects that money fuels.

60. **Credit card statement illustration**. Kate Bingaman-Burt. 2005.

Artist Kate Bingaman-Burt made drawings of all of her credit cards statements and sold them for the minimum balance due -- a commentary on credit, consumption, and debt.

61. **Origami money camera**. c.2011.

People use money as material for a wide variety of artistic projects.

62. Andy Warhol: Making Money. New York: Skira Rizzoli, 2010.

Andy Warhol used a dollar sign as a personal logo. This book traces the evolution over time of his refinement of the design.

63. Verifone 330 credit card reader. c. 2000.

The most common magnetic stripe card reader in the US today. Legacy systems like this reader complicate the value proposition for merchants who bear the cost of new means of payment.

64. Barbie cashier toy set. 2012.

This doll set allows the traditional toy cash register to be augmented by the ability to take a credit or debit card "swipe."

65. **"The Death of Cash."** Fortune Magazine, (166) 2, 118-128. July 23, 2012.

#### 66. New forms of digital payments.

With companies like Facebook, Google, and Apple all exploring payments, online gaming currencies like World of Warcraft Gold, and currency experiments like Bitcoin, is it only a matter of time before we live again in a world of multiple non-state issued currencies? Or is that world already here?

- a. Facebook credits. United States. 2012.
- b. iTunes gift card. United States. 2012.
- c. **Bitcoin**. Don Patterson. 2012. UC Irvine computer science professor Don Patterson created this three-dimensional representation of a Bitcoin, the cryptocurrency experiment launched by anonymous programmers in 2009.

d. **World of Warcraft (WoW) Gold**. Screenshot from website selling World of Warcraft gold. 2012.

#### 67. **Banco Santander credit card**. Brazil. 2011.

Chip-and-pin credit cards are the emerging global standard -- but not in the US, due to the existence of legacy point-of-sale terminals like the Verifone 330Z to the left of item 64.

68. a. **Square**. Square Inc. San Francisco, CA. 2011. Given to Bill Maurer by Beau Smith.

#### b. Promotional material.

Square allows anyone with a mobile smart phone to read and accept payments via credit card. The Square device plugs into the earphone jack.

69. Mobil/Exxon Key fob with beer tablet keychain. c. 1994 and 2012.

Speedpass was one of the first uses of radio-frequency ID chips for payment functions. This key fob could be waved at the gas pump to complete a transaction. Here, an Mobil/Exxon key fob hangs from a key chain with a replica 13th century BCE Akkadian receipt for the purchase of beer.

#### 70. Photographs of IMTFI fieldworkers.

IMTFI researchers Melissa Cliver and Isaac Oluwatayo in the field, in Mexico and Nigeria, respectively.

- a. **Melissa Cliver conducting an interview in Oaxaca**. Melissa Cliver. Oaxaca, Mexico. 2009.
- b. Isaac Oluwatayo in the field. Isaac Oluwatayo. Nigeria. 2010.
- 71. **Photograph of researchers at IMTFI conference**. Jenny Fan. Irvine, CA. 2011.

Photos from IMTFI's annual conference, where researchers present works in progress and engage in design exercises around money.

72. *Mobile Money Afghanistan*. Jan Chipchase. 2011.

A collaboration between IMTFI and Frog Design resulted in this booklet on mobile money in Afghanistan, where the launch of a mobile money transfer services is credited with reducing graft and also permitting new forms of courtship.

73. **New Organizational Models**. Melissa Cliver, 2010-11.

A collaborative project by IMTFI researchers, led by Melissa Cliver, this booklet documented the process of conducting research for the first set of studies funded by IMTFI.

74. **"An Emerging Platform: From Money Transfer System to Mobile Money Ecosystem."** Jake Kendall, Clara Veniard, Philip Machoka and Bill Maurer. *Innovations* 6 (4), 2012.

Authors discuss how mobile phone money transfer services are coming to operate like full-fledged payment networks in Kenya.

75. **IMTFI Map**. 2012.

This map shows the locations of IMTFI research projects as of September, 2012. Map by Jenny Fan.

- 76. a. Photograph of Catherine Eagleton, Kenneth Omeje, Fatima Yousif, Kai Sim during IMTFI researcher design session. What is Money? UC Irvine, Irvine, CA. Dec, 2011.
  - b. **Drawings from IMTFI design session**. Catherine Eagleton, Svtelana Tyukhteneva, et al. Irvine, CA. 2011.
- 77. Publications by IMTFI Researchers.
  - a. **Mujeres, finanzas sociales y violencia económica en zonas marginadas de Guadalajara**. Magdalena Villarreal. Instituto Jalisciense de las Mujeres, 2009.
  - b. **Earth. Water. Khan Altay: Altaians ethnic culture in the 20th century** (in Russian). Svetlana Tyukhteneva. Publishing house of the Kalmyk State University, 2009.
  - c. *Financial Inclusion in Sri Lanka: A Macroeconomic Perspective*. Sirimevan Colombage. The Open University of Sri Lanka, monograph no. 3, 2010.
- 78. **M-PESA t-shirt**. Nairobi, Kenya. Donated by Ndunge Kiiti and Jane Wanza Mutinda.

M-Pesa permits users to send money via their cell phones from person to person.

#### 79. M-PESA cell transfer.

Inserting the M-PESA SIM card into a mobile phone gives one access to the money transfer service.

- a. Nokia 1100 cell phone. Hong Kong.
- b. M-PESA SIM card. Nairobi, Kenya. 2010.
- 80. **M-PESA graph**. Bill Maurer and Nick Seaver. 2012.

Based on data from Western Union's and Safaricom's 2010 annual reports, M-Pesa processed more transactions in Kenya than Western Union did worldwide and 10% by value of all of Western Union's global money transfers.

- 81. A promotional diagram illustrating how to send money via M-PESA.
- 82. M-PESA's Bill Pay feature.

Diagram from Kendall, Maurer, Machoka and Veniard Innovations article (#74 in the exhibit) showing how M-PESA's bill pay function works. The bill pay function has enabled M-PESA to start working as a payment platform—like a credit card network—rather than just a money transfer service.

83. a, b. Google Wallet: phone and demo. Mountain View. 2012.

A demo of Google Wallet's mobile phone application and point-of-sale terminal. On loan from Google.

- 84. **Maximizing Mobile 2012 Infographic**. "Information and Communications for Development 2012: Maximizing Mobile." The World Bank 2012.
- 85. **Banking on Mobiles**. Ignacio Mas and Kabir Kumar. Consultative Group to Assist the Poor (CGAP), July 2008. http://www.cgap.org/publications/banking-mobiles-why-how-whom
- 86. **Personal Data: The Emergence of a New Asset Class**. World Economic Forum. "An Initiative of the World Economic Forum" in collaboration with Bain & Company, Inc., January 2011. http://www3.weforum.org/docs/WEF\_ITTC\_PersonalDataNewAsset\_Report\_2011.pdf

- 87. **The Poor and Their Money**. Stuart Rutherford. New Delhi: Oxford University Press, 2000.
- 88. **Coin bank**. Delhi, India. 2011. Donated by Mani Nandhi.

Coin boxes and piggy banks are now joined by mobile phones as convenient places to store value in many parts of the developing world.

89. **Women's microcredit photo**. Photo courtesy of Dr. Syed Aiman Raza, IMTFI researcher, 5/10/2010.

This image shows money handling from a Beesi network (a ROSCA or Rotating Savings and Credit Association). Shafia, an Organiser of 'Beesi', is paying out the 'pot' of Rs 23000 (\$479.16) to a member on her turn. The money will be used by the 'recipient' for the marriage of her daughter.

- 90. **Mobile Phones: The New Talking Drums of Everyday Africa.** Edited by Mirjam de Bruijn, Francis Nyamnjoh, Inge Brinkman. Langaa RPCIG. 2009.
- 91. **Cell phone and bank service in Nyanza Province**. Karthik Balasubramanian and Jake Kendall, Geospatial Analysis for Financial Inclusion Tracking. January 10, 2012, *Mobile Money for the Unbanked* blog. http://www.gsma.com/developmentfund/geospatial-analysis-for-financial-inclusion-tracking/

Mobile money services can benefit areas where brick and mortar banks are few and far between. This map shows access points for formal financial services (centered on the concentric circles), against wireless coverage and the percentage of people living in poverty. It shows that, in Nyanza Province, 100% of the poor have access to a wireless signal, while only 21% have access to a bank or ATM. This represents the potential of mobile money for financial inclusion.

- 92. Cell phone transfers.
  - a. **Screenshot of cell phone money transfer.** Photo by Ben Lyon. Sierra Leone.
  - b. Nokia 5190 cell phone.

Simple feature phones like these are ubiquitous in the developing world. Mobile payment services there use simple technology like this rather than high-end smart phones.

93. Mobile money in Haiti.

After the Haiti earthquake of 2010, mobile phone companies started to offer basic money transfer service, aiding in the recovery. Donated by Erin Taylor, Heather Horst,

Espelencia Baptiste.

- a. Voila comic poster. Port au Prince, Haiti. 2010.
- b. "Men Tcho Tcho Mobile!!!" comic poster. Port au Prince, Haiti. 2010.
- 94. **Robert Garfias fieldwork photo**, 1973.

UC Irvine Professor Robert Garfias records Burmese musicians, 1973.

- 95. "Anthropologists! Anthropologists!" cartoon panel. Gary Larson. The Far Side, 1984.
- 96. **Coming of Age in Samoa**. Margaret Mead. New York: William Morrow and Company, 1928.

An anthropological classic.

- 97. Fieldwork photo of Margaret Mead and informants. 1926.
- 98. Field notes. Bill Maurer. 2010.

The most basic ethnographic research tool: the notebook.

- 99. **Audio recorder**. Bill Maurer.
- 100. Writing culture: the poetics and politics of ethnography: A School of American Research advanced seminar. James Clifford, George E Marcus and School of American Research (Santa Fe, N.M.). Berkeley: University of California Press, 1986.

UC Irvine Professor George Marcus is credited with redefining ethnographic fieldwork for the modern era.

101. **Coming of Age in Second Life: An Anthropologist Explores the Virtually Human**. Tom Boellstorff. Princeton: Princeton University Press, 2008.

UC Irvine Professor Tom Boellstorff puts a new spin on an old classic.

102. Tom Boellstorff fieldwork still.

Boellstorff conducted field research in the online virtual world, Second Life.