# The Mark Of The Beast

## **Table Of Contents**

The Antichrist 1

The Coming Mark Of The Beast 10

End Time Signs 12

Charts (Seventy Weeks Of Daniel) 16,17

**Tribulation Judgements 18** 

**Newspaper Headlines 19** 

**Total Surveillance 29** 

**Biometrics 30** 

Rfid Technology 31

New Advances In Technology 32

Current Trends Towards A Global Government And Economy 63

**Conclusion 86** 





## The Antichrist

Adolf Hitler used the power of propaganda. He railed against things that he knew the people feared and perceived as threats. In return, those who followed him began to treat Hitler with almost religious adoration. After Martial law was declared in Berlin, the people all over Germany turned to "Fuhrer worship". Next came the elections of March 5, 1933, then the Nazis began a systematic takeover of the state governments throughout Germany, ending a centuries old tradition of local political independence. Armed SA and SS thugs barged into local government offices using the state of emergency decree as a pretext to throw out legitimate office holders and replace them with Nazi Reich commissioners. On March 23, the Nazi controlled Reichstag passed the "Enabling Act." This act finally established Adolph Hitler as the total Dictator of Germany.

After this, the "Gleichschaltung" (Synchronizing) began – the total coordination and absorption of the entire nation under the Nazi boot. Just like Hitler used the power of propaganda to gain his position so will the coming antichrist and even though Hitler failed to fulfill his dream of world domination this leader certainly will not. Bible prophecy tells us that the time is coming when the world will be united under an incredibly intelligent, charismatic, powerful, evil man. The apostle Paul wrote "Let no one deceive you by any means: for that day will not come, except there come a falling away comes first, and that man of sin is revealed, the son of perdition; Who opposeth and exalteth himself above all that is called God, or that is worshiped, so that he as God sitteth in the temple of God, showing himself that he is God. And now you know what withholdeth that he may be revealed in his time. For the mystery of iniquity doeth already work; only he who now letteth will let, until he be taken out of the way. And then shall that wicked be revealed." 2 Th. 2:3-8 Paul declared that the Antichrist's coming will be "according to the working of Satan, with all power and signs and lying wonders." 2 Th. 2:9 There are some that believe the Antichrist will receive his position by performing a miracle by coming back to life from apparent death. We read, "I saw one of his heads as if it had been mortally wounded, and his deadly wound was healed. And all the world marveled and followed the beast" Rev 13:3 This scripture seems to indicate that there may be an attempt on his life and by recovering from this mortal wound the world will be in awe of him.

Another type or forerunner of the coming Antichrist is Antiochus Epiphanes (Epiphanes - God Manifest). After the end of Alexander the Great's reign, the Greek Empire was divided among four rulers: Cassander; ruling over Greece and its region, Lysimachus; ruling over Asia Minor, Seleucus; ruling over Syria and Israel's land, Ptolemy; ruling over Egypt. Antiochus IV Epiphanes ruled from 175—163 BC over the Syrian section of Alexander's empire. He is the little horn of Daniel 8:9 and appears in the context of the third kingdom (Greece). To consolidate his empire and strengthen his hold over the region, Antiochus decided to Hellenize the Jews by outlawing Judaism and by ordering the worship of Zeus as the supreme god. This was anathema to the Jews and when they refused, Antiochus sent an army to enforce his decree. Because of the resistance, the city was destroyed, many were slaughtered, and a military Greek citadel called the Acra was established. Antiochus as foretold in the book of Daniel "waxed exceeding great, toward the south, and toward the east, and toward the pleasant land (Israel). And it waxed great, even to the host of heaven; and it cast down some of the host and of the stars to the ground, and stamped upon them. Yea, he magnified himself even to the prince of the host, and by him the daily sacrifice was taken away, and the place of the sanctuary was cast down. And an host was given him against the daily sacrifice by reason of transgression, and it cast down the truth to the ground; and it practised, and prospered". Daniel 8:9-12 Because these prophecies point to Antiochus Epiphanes as well as the future Antichrist they are referred to as double reference prophecies.

Similarities between Antiochus Epiphanes and the coming Antichrist: They both (1) Expand their dominion toward the south, toward the east, and toward the land of Israel (2) Conquer other rulers and persecute the people of Israel (3) Blasphemy God and command idolatrous worship towards foreign Gods (4) Put a stop to temple sacrifices (5) And desecrate the temple of God.

# The Revived Roman Kingdom

Contained within the books of Daniel and Revelation is a description of the coming kingdom of the antichrist. The beast of Revelation (Chapter 13) has ten horns and seven heads. The seven heads represent a total of 7 great empires. The seven heads are also seven kings or kingdoms. The five fallen ones are Egypt, Assyria, Babylon, Persia, and Greece. The sixth is the Roman Empire of the past. The seventh is going to be a revived Roman kingdom. The antichrist is the seventh head of the beast, and both the seventh and eight king. Rev 17:11 The ten horns represent ten nations that will make up the Antichrist's empire. The lion, bear, and leopard in Revelation 13, as in Daniel 7, represent the Babylonian, Medo-Persian, and Greek empires. This suggests that the final empire will combine the strongest elements of all these ancient kingdoms. "And I stood upon the sand of the sea, and saw a beast rise up out of the sea, having seven heads and ten horns, and upon his horns ten crowns..." "And the beast which I saw was like unto a leopard (Greece), and his feet were as the feet of a bear (Medo-Persia), and his mouth as the mouth of a lion (Babylon)" Rev 13:1-2

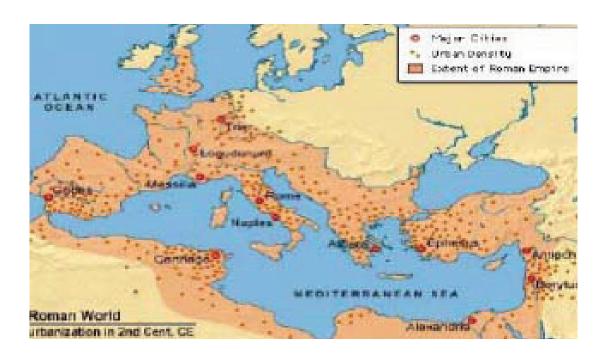
4



The prophet Daniel spoke of four gentile kingdoms which were to rule the earth: Babylon, Medo-Persia, Greece, and Rome. The last of these Rome was to rule again right before the (Times of the Gentiles) were to be fulfilled. Here's what Nebuchadnezzar saw in his dream that represented these four kingdoms: "The image's head was of fine gold (Babylon), his breast, and his arms of silver (Medo-Persia), his belly and his thighs of brass (Greece), his legs of iron, his feet part of iron and part of clay (Rome)." Daniel 2:32,33



Concerning the Revived Roman Empire; "Whereas thou sawest the feet and toes part of potters' clay and part of iron, the kingdom shall be divided; but there shall be in it the strength of the iron, forasmuch as thou sawest the iron mixed with miry clay."



# The Roman Empire

"Thus he said, the fourth beast shall be the fourth kingdom upon the earth, which shall be diverse from all kingdoms, and shall devour the whole earth, and shall tread it down, and break it in pieces." Daniel 7:23 "And the ten horns out of this kingdom are ten kings that shall arise: and another shall rise after them; and he shall be diverse from the first, and he shall subdue three kings." Daniel 7:24 Many bible scholars believe that the European Union is where the antichrist is given his kingdom.

Others believe that he may get his kingdom from 10 economic blocs or regions. The antichrist will reign for 3  $\frac{1}{2}$ years during the last half of the 70th week of Daniel. Daniel 7:25 Rev. 13:5 And it is in the middle of this final 7 year tribulation period that the great tribulation starts after the antichrist and the false prophet set up an idol in the temple and the antichrist demands to be worshipped as God. Daniel 9:27 "And there shall be a time of trouble, such as never was since there was a nation even to that same time..." Daniel 12:1 It's also at this time that the false prophet requires that everyone take the mark of the beast. "And I beheld another beast coming up out of the earth" "and he doeth great wonders, so that he maketh fire come down from heaven in the sight of men and he deceiveth them that dwell on the earth by the means of those miracles" "And he causeth them to make an image to the beast, which had the wound by a sword, and did live." "and he had power to give life unto the image of the beast...and cause that as many as would not worship" or receive the mark of the beast "should be killed." Rev 13:11-17 Just how will the antichrist come to his end? By advancing his armies to the middle east "he shall enter also into the glorious land, and many countries shall be overthrown..." "and the land of Egypt shall not escape. But he shall have power over the treasures of gold and silver, and over all the precious things of Egypt..." "But tidings out of the east and out of the north (the armies of China and Russia) shall trouble him: therefore he shall go forth with great fury to destroy, and utterly make away many. And he shall plant the tabernacles of his palace between

the seas in the glorious holy mountain; yet he shall come to his end, and none shall help him." Daniel 11:41-45 The world's armies are now gathered north of Jerusalem for the battle of Armageddon. "And this shall be the plague wherewith the Lord will smite all the people that have fought against Jerusalem; their flesh shall consume away while they stand upon their feet, and their eyes shall consume away in their holes, and their tongue shall consume away in their mouth." Zechariah 14:12

# Here's a list of the Antichrist's characteristics and traits:

- I. He will be extremely intelligent and he might be involved in the Occult "...understanding dark sentences..." Daniel 8:23 II. He will be very boastful. "a mouth that spake very great things" Daniel 7:20
- III. "And through his policy also he shall cause craft to prosper in his hand" "...and by peace shall he destroy many" Daniel 8:25
- IV. He is called the "king of fierce countenance" Daniel 8:23 V. His "look will be more stout than his fellows" Daniel 7:20 VI. "He will confirm a covenant with the many for one week" The Antichrist negotiates a peace treaty between Israel and her enemies setting the stage for a final seven-year tribulation period (See charts). Daniel 9:27
- VII. He will have many successful military exploits and also attempt to destroy the Jews after he comes to power. "He shall destroy wonderfully, and shall prosper, and practice, and shall destroy the mighty and the holy people" Daniel 8:24

VIII. He will be the head of a kingdom given to him by 10 kings. "And the ten horns which thou sawest are ten kings, which have received no kingdom as yet; but receive power as kings one hour with the beast." Rev. 17:12

IX "And he shall speak great words against the most High, and shall wear out the saints of the most High, and think to change times and laws: and they shall be given into his hand..." His reign will begin at the start of the final 3 ½ years of the tribulation period. Daniel 7: 25

X. There may be an attempt to kill him. "And his deadly wound was healed, and all the world wondered after the Beast" Rev. 13:3

XI. He will proclaim himself God. 2 Thess. 2:4

XII. He will demand to be worshipped. "And causeth the earth and all that dwell therein to worship the beast..." Rev. 13:12 XIII. He will require that everybody on Earth receive a mark or identification on their forehead or hand and nobody will legally be able to buy or sell without it. "And that no man might buy or sell, save he that hath the mark..." Rev. 13:16, 17

XIV. He will lead his army to fight against the world's military forces in the battle of Armageddon where Christ will defeat them. "And I saw the Beast, and the kings of the earth, and their armies gathered together to make war..." Rev. 19 19, 20

The following scriptures describe how arrogant and proud the antichrist will be. "And the king shall do according to his will; and he shall exalt himself, and magnify himself above every god, and shall speak marvelous things against the God of gods, and shall prosper till the indignation be accomplished." Daniel 11: 36

"Neither shall he regard the God of his fathers, ...nor regard any god: for he shall magnify himself above all." Daniel 11:37





Because of this antichrist and his false prophet: all, both small and great, rich and poor, free and slave, will receive a mark on their right hand or on their foreheads, so that no one may buy or sell except one who has the mark, or the name of the beast, or the number of his name. Rev 13:16-17 This mark, which is usually called the "mark of the beast," will be used by the antichrist to place everyone under his direct control. To receive this mark will ensure the wrath of God and result in a person being cast into the lake of fire. Revelation 14:9-11

And to the one who doesn't take the mark this person will be end up being beheaded by the antichrist. Revelation 20:4 Everyone will be faced with the decision of having to decide whether or not to take the mark. No one will be exempt. This may be in the form of a biometric devise or a rfid tattoo or chip. By receiving the mark of the beast a person will be able to obtain all of the necessities of life: such as food, water, clothing, and shelter. People who refuse will be forced to go underground to escape being caught. A cashless society is what the bible is referring to when it speaks about the coming mark of the beast. A common international system will have to be put in place so they will be able to track all buying and selling. There are already systems in use today to track products; such as the universal product code. When this happens money will be replaced by computerized scanning devices making electronic transactions our only form of currency. Fingerprint scanners, voice print scanners, eye scanners, smart cards, and implanted computer chips are already being used today. It's remarkable that 2,000 years ago the bible predicted that this technology would be developed and used by the antichrist when he reigns during the last half of the final 7 year tribulation period - Daniel's seventieth week. (See Charts) For anyone to take "the mark of the beast" the bible issues this warning: "If any man worship the beast and his image, and receive his mark in his forehead, or in his hand, the same shall drink of the wine of the wrath of God, which is poured out without mixture into the cup of his indignation; and he shall be tormented with fire and brimstone in the presence of the holy angels, and in the presence of the Lamb." Revelation 14:9-10 11

# **End Time Signs**

When Jesus' disciples asked what would signal his second coming, he gave them several signs to watch for. He also taught that the time immediately before his coming would be known as the "beginning of sorrows" (Matt. 24:8). Christ stated that these birth pains would increase and become much more intense until the end of this age.

- 1. False Christs/prophets (Matthew 24:4; 24:11): "For many will come in my name, claiming, I am the Christ, and will deceive many," "...and many false prophets will appear and deceive many people."
- 2. Wars and Rumors of Wars (Matthew 24:6): "Your will hear of wars and rumors of wars, but see to it that you are not alarmed. Such things must happen, but the end is still to come. Nation will rise against nation, and kingdom against kingdom."
- 3. Famines (Matthew 24:7): "There will be famines...in various places."
- 4. Earthquakes (Matthew 24:7): "There will be...earthquakes in various places."
- 5. Religious persecution (Matthew 24:9): "Then you will be handed over to be persecuted and put to death, and you will be hated by all nations because of me."
- 6. Increase in Wickedness (Matthew 24:12:13): "Because of the increase of wickedness, the love of most will grow cold, but he who stands firm to the end will be saved."

- 7. The worldwide dissemination of the Gospel (Matthew 24:14): "And this gospel of the kingdom will be preached in the whole world as a testimony to all nations, and then the end will come."
- 8. The Sign of Noah (Matthew 24:37-39): "As it was in the days of Noah, so it will be at the coming of the Son of Man. For in the days before the flood, people were eating and drinking, marrying and giving in marriage, up to the day Noah entered the ark; and they knew nothing about what would happen until the flood came and took them all away."

  9. Signs and wonders in the heavens (Luke 21:11): "There
- 9. Signs and wonders in the heavens (Luke 21:11): "There will be...great signs from heaven..."
- 10. Pestilence (Luke 21:11): "There will be...pestilences in various places..."
- 11. Fearful Events (Luke 21:11): "There will be...fearful events..."
- 12. Signs in the Sun, Moon, and Stars (Luke 21:25): "There will be signs in the sun, moon and stars."
- 13. Fear and Apprehension for the Future (Luke 21:26): "Men will faint from terror, apprehensive of what is coming on the world, for the heavenly bodies will be shaken."

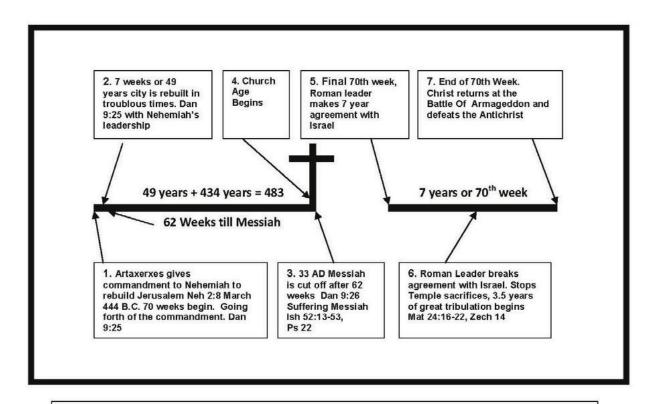
# In addition, here are several Tribulation Indicators:

1. The progress of the Middle East peace process towards a final settlement or covenant (Daniel 9:27): "He will confirm a covenant with many for one week. In the middle of the seven (week) he will put an end to sacrifice and offering. And on a wing of the temple he will set up an abomination that causes

- desolation, until the end that is decreed is poured out on him."
- 2. The establishment of a new Jewish Temple (Daniel 9:27; Matthew 24:15): "So when you see standing in the holy place the abomination that causes desolation, spoken of through the prophet Daniel, then let those who are in Judea flee to the mountains."
- 3. The growth of world community (Revelation 11:9): "For three and a half days men from every people, tribe, language and nation will gaze on their bodies and refuse them burial. The inhabitants of the earth will gloat over them and will celebrate by sending each other gifts, because these two prophets had tormented those who live on the earth."

  4. Mark of the Beast advances in biometrics and smart card
- 4. Mark of the Beast advances in biometrics and smart card technology that would facilitate the mark of the beast (Revelation 13:16-18), the number of man, 666: "He the second beast also forced everyone, small and great, rich and poor, free and slave, to receive a mark on his right hand or on his forehead, so that no one could buy or sell unless he had the mark, which is the name of the beast or the number of his name."
- 5. The creation of an international alliance of 10 states (Revelation 17:12-14) to empower the beast: "The ten horns you saw are ten kings who have not yet received a kingdom, but who for one hour will receive authority as kings along with the beast. They have one purpose and will give their power and authority to the beast."
- 6. The disposition of military forces in and around Jerusalem (Ezekiel 38:8; Zechariah 12; Luke 21:20; Revelation 19:19): "In future years, you Gog will invade a land that has

recovered from war, whose people were gathered from many nations to the mountains of Israel, which had long been desolate. They had been brought out from many nations, and now all of them live in safety. You and all your troops and the nations with you will go up, advancing like a storm; you will be like a cloud covering the land." "I am going to make Jerusalem a cup that sends all the surrounding peoples reeling. Judah will be besieged as well as Jerusalem. On that day, when all the nations of the earth are gathered against her, I will make Jerusalem an immovable rock for all the nations. All who try to move it will injure themselves...On that day, the Lord will shield those who live in Jerusalem...On that day, I will set out to destroy all the nations that attack Jerusalem." "When you see Jerusalem being surrounded by armies, you will know that its desolation is near." "Then I saw the beast and the kings of the earth and their armies gathered together to make war against Christ and his army. Then the beast was captured and with him the false prophet who had performed the miraculous signs on his behalf."



### 70 Weeks of Daniel Timeline

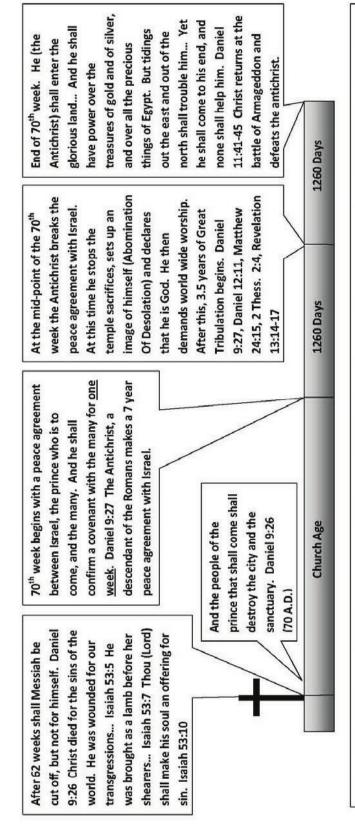
Dan 9:24 Seventy weeks are determined upon thy people and upon thy holy city, to finish the transgression, and to make an end of sins, and to make reconciliation for iniquity, and to bring in everlasting righteousness, and to seal up the vision and prophecy, and to anoint the most Holy. Dan 9:25 Know therefore and understand, that from the going forth of the commandment to restore and to build Jerusalem unto the Messiah the Prince shall be seven weeks, and threescore and two weeks: the street shall be built again, and the wall, even in troublous times. Dan 9:26 And after threescore and two weeks shall Messiah be cut off, but not for himself: and the people of the prince that shall come shall destroy the city and the sanctuary; and the end thereof shall be with a flood, and unto the end of the war desolations are determined. Dan 9:27 And he shall confirm the covenant with many for one week: and in the midst of the week he shall cause the sacrifice and the oblation to cease, and for the overspreading of abominations he shall make it desolate, even until the consummation, and that determined shall be poured upon the desolate.

Jewish Calendar 360 days/year 7 Weeks +62 Weeks=69 Weeks 69 X 7 (years/week) =483 years 483 years X 360 days/year =173,880 Days

Gregorian Calendar 365.242 days/year 173,880/365.242 =476.06792 .06792 x 365 days=24 days 444 BC - 476 years =33 AD 33 AD (Year 0 being 1) + 24 days ( March 5th. 30th March 29th 33 AD

# Daniel's Seventieth Week

# Daniel 9:27



troublesome times under Nehemiah's leadership. Then 62 weeks were fulfilled when the Messiah (Jesus Christ) was cut off. (7 + 62) = 69 weeks of years From the going forth of the commandment to rebuild Jerusalem... Date 444 B.C. Daniel 9:25 In 7 weeks or 49 years the streets and walls are rebuilt in between Israel and her enemies this sets the stage for the final seven-year tribulation period. There are 2 main reasons for the great tribulation (last 3 1/4) everlasting righteousness. Daniel 9:24 The seventy weeks of Daniel begins when Artaxerxes, King of Persia commands Nehemiah to rebuild Jerusalem. 49 + 434 = 483 years to 33 A.D. Leaving a  $70^{th}$  week left to be fulfilled. 483 + 7 = 490 years or 70 weeks. After the antichrist negotiates a peace treaty years): first, to end the "the times of the Gentiles" and second, to prepare for the restoration of Israel. The second half of the tribulation period begins with the rise of the Antichrist to world power. It is at this time that he then demands to be worshipped and that all the world's inhabitants receive his 70 weeks are determined upon thy people and upon thy holy city, to finish the transgression, and to make reconciliation for iniquity, and to bring in mark. Those who refuse will be killed for not receiving the mark of the beast. There will be millions of people killed as a result.

## THE TRIBULATION JUDGEMENTS

(Seal 1) And behold a white horse: and he that sat on it had a bow; and a crown was given unto him: and he went forth conquering, and to conquer. (This is the Antichrist beginning his worldwide conquest)

(Seal 2) And there went out another horse that was red: and power was given to him that sat thereon to take peace from the earth. (War)

(Seal 3) And I beheld, and Io a black horse; and he that sat on him had a pair of balances in his hand. A measure of wheat for a penny, and three measures of barley for a penny. (Inflation and famine)

(Seal 4) And I looked, and behold a pale horse: and his name was Death, and hell followed with him. And Power was given unto them over the fourth part of the earth.

(Seal 5) I saw under the altar the souls of them who had been slain for the word of God. (Martyrdom of saints)

(Seal 6) Hide us from the face of him that sitteth on the throne and from the wrath of the lamb. (Natural disasters of various kinds)

(Seal 7) (Contains the 7 trumpet judgements)

(Trumpet 1) And the third part of trees was burnt up, and all green grass was burnt up. (Death of vegetation)

(Trumpet 2) And the third part of the sea became blood; and the third part of the creatures in the sea died. (Seas poisoned)

(Trumpet 3) And the third part of the waters became wormwood; and many men died because of the waters. (Fresh water poisoned)

(Trumpet 4) And the third part of the sun was smitten, and the third part of the moon, and the third part of the stars... and the third part of the day and the night shone not for a third part of it.

(Trumpet 5) And he opened the bottomless pit; And there came out of the smoke locust upon the earth. And they were commanded to hurt the men which have not the seal of God in their foreheads. (Pain inflicted on those who follow the antichrist)

(Trumpet 6) And the four angels were loosed... to slay a third part of men. And the number of the army was 200,000,000. (War results in death to 2 billion people)

(Trumpet 7) The kingdoms of this world are become the kingdoms of our Lord. (The end of the age)

(Vial 1) And the angel poured out his vial upon the earth; and there a noisome and grievous sore upon the men who had the mark of the beast and which had worshiped his image.

(Vial 2) And the angel poured out his vial upon the sea; and it became as the blood of men. (Seas poisoned)

(Vial 3) And the angel poured out his vial upon the rivers and fountains of waters; and they became blood. (Fresh waters poisoned)

(Vial 4) And the angel poured out his vial upon the sun; and men were scorched with great heat.

(Vial 5) And the angel poured out his vial upon the seat of the beast; and his kingdom was full of darkness and they gnawed their tongues for pain.

(Vial 6) And the angel poured out his vial upon the great river Euphrates; that the way of the kings of the east might be prepared. (Battle of Armageddon)

(Vial 7) And the angel poured out his vial into the air; and there came a great voice out of the temple of heaven, from the throne, saying, It is done. And there fell upon men a great hail out of heaven.

Here are some recent newspaper articles showing the current use of biometric and rfid technology.

Biometrics To Be Used On Ids - State will add biometrics component to prevent fake driver's licenses



Minnesota plans to add biometric facial recognition technology to driver's licenses as part of a broader effort to protect consumers from identity theft and unauthorized use of personal data. That effort will include stiffer criminal penalties for hackers and others who abuse access to personal data on computers. "Identity theft causes great trauma, inconvenience and damage to a lot of people and families," the governor said at a Capitol news conference. He also stated that the state must do more to crack down on identity thieves and strengthen safeguards for personal information. The face scans will enable the state to detect people attempting to obtain licenses using the same photo with multiple names and birth dates, or the same name and birth date with multiple people's photos, said state Public Safety Commissioner Michael Campion.

19

# Police advisory body installs 3D facial recognition system – London UK

The Police Information Technology Organisation (PITO) has awarded a contract to Premier Electronics, in alliance with A4 Vision and Global Securities, to install a real time 3D facial recognition technology. PITO, which provides information technology and communications systems and services to the police and other criminal justice organisations in the U.K., has selected the system to control access to its Biometrics Demonstration Laboratory at its headquarters. In addition to providing access control, it will be used for demonstrations to staff and stakeholders from across the police service and wider government, as well as for evaluation purposes. The A4 Vision Access 3D face reader system combines standard digital photography with real time 3D facial recognition, providing a very powerful recognition and identification system with the ability to also produce a standard digital photograph. The Vision Access 3D face reader is commonly used to control physical access to buildings, banks, hospitals, airports and other types of entry points for the commercial and Civil ID market.

Australian state police eye fingerprint biometrics - Police in the Australian state of New South Wales are set to introduce portable, handheld fingerprint scanners

Static biometric devices, known as LiveScan, are already in

use in NSW and Victorian Police stations, provided by French electronics company Sagem, which is a supplier to military organizations across the globe. However, NSW police are keen to see the introduction of portable biometric devices that can be used during routine traffic infringements for on-the-spot identity checks. The devices, showcased in Sydney at a recent launch of its new mobile phones, hold up to 100,000 fingerprints and are extremely light and rugged and ideal for law enforcement use, Sagem officials said.

# **Eye Scan Technology Comes to Schools - A New Jersey School District Is Piloting the System**

Parents who want to pick up their kids at school in one New Jersey district now can submit to iris scans, using the same technology that helps keep our nation's airports and hotels safe. As many as four adults can be designated to pick up each child in the district, but in order to be authorized to come into school, they will be asked to register with the district's iris recognition security and visitor management system. At this point, the New Jersey program is not mandatory. When picking up a child, the adult provides a driver's license and then submits to an eye scan. If the iris image camera recognizes his or her eyes, the door clicks open. If someone tries to slip in behind an authorized person, the system triggers a siren and red flashing lights in the front office. The entire process takes just seconds. This technology is already being used at the Orlando

International Airport, where the program, known as Clear, has been in operation.

Speed through the checkout with just a wave of your arm - It may sound like a sci-fi fantasy but shoppers may one day be able to pay their grocery bills using a microchip implanted in their body

The idea is already catching on with today's iPod generation. According to research released today by the Institute for Grocery Distribution (IGD), a retail think-tank, almost one in ten teenagers and one in twenty adults are willing to have a microchip implanted to pay shop bills and help to prevent card or identity fraud and muggings. A quick scan of the arm would connect immediately to bank details and payments could be made swiftly. Such microchips are already used in cats, dogs and horses. But now the retail industry is looking at body chips among a range of biometric payment methods, including fingerprint and iris recognition. So far the only example of a human body chip being used is at the VIP Baja Beach Club in Barcelona, where people wear bikinis and shorts and there is nowhere to carry wallets and purses. The club offers clients a microchip, injected in the arm, which gives them access to certain areas of the club and acts as a payment method at the bar. This chip, made by the VeriChip Corporation, is a glass capsule about the size of a grain of rice, which sits under the skin. It carries a ten-digit personal number that can be linked to a person's bank account, and has been a success at the club.

22

RFID Chips To Travel in U.S. Passports - U.S. passports issued after October 2006 will contain embedded radio frequency identification chips that carry the holder's personal data and digital photo

According to reports the US government has placed an order with a California company, Infineon Technologies North America for smart chip-embedded passports. The Associated Press said the new US passports include an electronic chip that contains all the data contained in the paper version name, birth date, gender, for example and can be read by digital scanners at equipped airports. They cost more than their predecessors but the State Department said they will speed up going through customs and help enhance border security.

Germany To Issue Passports with Biometric Data - First passport in Europe to use RFID technology

Germany has taken a big step in the battle against organized crime and terrorism by unveiling a new passport with a chip that contains biometric data. The country plans to be among the first in Europe to issue biometric passes. Otto Schily presented the German biometric passport at a ceremony in Berlin, the Interior Ministry said in a statement. The new passport, valid for 10 years, will include an embedded RFID (radio frequency identification chip) that will initially store a digital photo of the passport holder's face. Starting in March 2007, the holder's left and

23

right index fingerprints will also be stored on the chip. The reasons for using noncontact RFID chips are twofold: contact points in traditional chip cards are not designed for 10 years of use; and passports don't fit in present chip-card readers, according to Germany's Federal Office for Information Security (BSI).

EU readies bio-passports - EU governments will issue new biometric VeriChip To Test Human Implantable RFID On Military passports containing facial images

Passports issued by EU member states are required to have digital photographs stored in a microchip embedded in the document. For new passports issued after June 28, 2009, they are to store two fingerprints of their holders on the passport chip. Member states have had since February 2005 to get ready to add the chip with facial scans to their passports. EU officials said the biometric features, which reduce patterns of fingerprints, faces and irises to mathematical algorithms stored on a chip, would go beyond security standards demanded by the United States.

Wal-Mart Backs RFID Technology - Will require suppliers to use 'smart' tags

Wal-Mart Stores Inc. said it plans to require its top 100 suppliers to put radio-frequency identification tags on shipping crates and pallets, a move that's likely to spur broader adoption of the technology because of

Wal-Mart's market clout. However, at the Retail Systems 2003/VICS Collaborative Commerce conference, IT managers and technology vendors alike said that RFID devices still need to overcome major manufacturing, pricing and standardization hurdles before widespread usage can begin. Wal-Mart's move is expected to result in the deployment of nearly 1 billion RFID tags with embedded electronic product codes (EPC) for tracking and identifying items at the individual crate and pallet level, said Pam Kohn, vice president of the Bentonville, Ark. based retailer's global supply chain operations. But even Wal-Mart's initial RFID effort will be narrowly focused. Although RFID tags can gather and track a variety of data related to products, materials and more, Kohn said Wal-Mart will concentrate at first on using the technology to improve inventory management in its supply chain.

Lithuania-based Neurotechnology has unveiled VeriLook Surveillance SDK, a new biometric technology for real-time face identification using video surveillance cameras

The VeriLook Surveillance SDK is intended for real-time identification of faces from high-resolution digital surveillance cameras, which can be mounted in airports, retail stores, on the street or in other locations where passers-by may not be looking into a camera. It also can be used for easy time-attendance control applications when a camera is mounted near an entrance, enabling fast, automatic counting or recognition of individuals as they

pass through. Once a face is detected, it is tracked in all successive frames of video until it disappears from camera view. Face appearance, tracking and disappearance events are reported to the system. This technology can be used in locations where people may not be looking directly into the camera.

Alabama Grips Crime With NEC Palm and Fingerprint Identification System - Huntsville Police Department Becomes Second Implementation in State With Automated Connectivity to the Alabama Bureau of Investigation

RANCHO CORDOVA, Calif.-NEC Corporation of America, a premier provider of IT, network and telephony solutions, has announced the City of Huntsville, Alabama Police **Department selected its Automated Fingerprint Identification** System (AFIS) with palm print matching to dramatically enhance its ability to quickly and reliably identify crimescene prints and match them to city and state databases. The Huntsville Police Department joins the Mobile (AL) Police Department as the second Full Use Access Agencies (FUAA) AFIS in the State of Alabama with automated connectivity to the NEC AFIS located at the Alabama Bureau of Investigation (ABI) in Montgomery. The NEC AFIS installed at Huntsville Police Department is capable of automated input and search/match functions for both fingerprints and palm prints. The City of Huntsville Police Department NEC AFIS is pre-loaded with electronically-converted fingerprint

images from the Alabama Bureau of Investigation (ABI) system, allowing the police department to immediately search known Huntsville records, and expand the search to the statewide database in the absence of matches at a local level. The system at ABI then automatically forwards Huntsville Police Department searches to the Federal Bureau of Investigation (FBI). ABI and the FBI then both send notification back to the Huntsville Police Department with an identification or non-identification response.

# Mecklenburg Co., N.C. Sheriff's Office Picks Iris Biometric Technology

Biometric Intelligence & Identification Technologies (BI(2) Technologies) of Plymouth, Massachusetts announced that they will unveil a new cutting edge technology and database that for the first time, registers and tracks convicted sex offenders using iris recognition biometric technology. BI(2) Technologies has partnered with Mecklenburg County (NC) Sheriff Jim Pendergraph to develop the Sex Offender Registry and Identification System (SORIS(TM)). Sheriff Pendergraph's office will become the first in the nation to install the system. SORIS(TM) registers and positively identifies convicted sexual predators using iris recognition biometric technology, the quickest and most accurate identification technology available. Iris recognition biometric technology positively determines the identity of an individual by capturing a high-resolution digitally encrypted photograph of an individual's iris.

I've got a biometric ID card - Biometric testing of face, eye and fingerprints could soon be used on every resident of the UK to create compulsory identity cards

BBC News Online's Tom Geoghegan volunteered for a pilot scheme and looked, unblinking, into the future. I was ushered into a room and directed to sit in a sophisticatedlooking booth, facing a hi-tech camera. No going back now. The first step is facial recognition, which is like a prolonged photograph without the flash. No cheesy grins will be allowed, because the machine is scanning the measurements of your face and "doesn't like teeth". Next came the iris scan which required more concentration because I had to stare hypnotically at two ellipses in the camera, while the machine verbally directed me. "Come closer," says a Big Brother-like voice, instructing me to shuffle my seat forward while keeping my eyes fixed on the shapes. After about 60 seconds, the machine indicated the scanning was complete. No messy carbon required for the fingerprints. Instead I had to put each hand's four fingers, then the thumb, on a glass scanner. My prints appeared on a computer screen and within minutes were compared against one million others which, for the sake of the pilot scheme, had been imported from the US. With all three steps completed, I had to give a copy of my signature which they stored electronically. I filled out a feedback form about my experience and then the ID card was ready and in my hands.



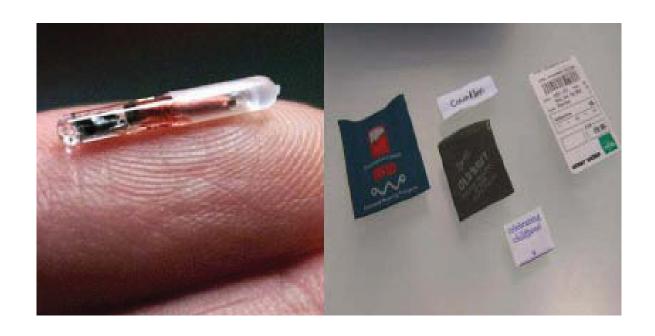
## **Total Surveillance**

Electronic surveillance: it's everywhere and it's growing. Has the demand for and use of electronic surveillance increased? Yes, because of the 9/11 tragedy there has been a renewed interest in security using biometrics with ID cards and in airports, e.g. video surveillance enhanced by facialrecognition technology to combat terrorism. Allowing for this has been the rapid advances in telecommunications technology having been accompanied by a growth in the potential effectiveness of electronic surveillance and a steady increase in government surveillance activity. With biometric ID systems, as with national ID systems, we should be concerned about a system that provides greater social surveillance of the population in general. And, because they're continually making new discoveries to increase the effectiveness of biometrics, rfid chips, etc., the government may soon be tracking us all.



## **Biometrics**

Biometrics refers to the automatic identification or identity verification of living persons using their unique physical or behavioral characteristics. Many body parts, personal characteristics and imaging methods have been suggested and used for biometric systems, such as: fingers, hands, feet, faces, and eyes, etc. The biometric method of identification offers several advantages over traditional methods involving ID cards or pin numbers for various reasons: (1) the person to be identified is required to be physically present; (2) identification based on biometric techniques obviates the need to use a password, personal identification number (pin), key, or ID card. By using realtime recognition, biometric techniques can prevent unauthorized access to secure systems. This is why biometrics are already being integrated into present security systems and are being used to reduce financial fraud.



# Rfid Technology

Total RFID Surveillance. Imagine a future in which your every belonging is marked with a unique number identifiable with the swipe of a scanner; where your refrigerator keeps track of its contents; where the location of your car is always pinpoint-able; and where signal-emitting pinpoint signal microchips storing personal information are implanted beneath your skin. This may be the future of radio frequency identification (RFID), a technology whose application has so far been limited largely to supply-chain management. An RFID tag or chip is an object that can be attached to or incorporated into any product, animal, or person for the purpose of identification using radio waves. RFID's are set to be applied to a whole range of consumer goods. They're already being used to keep track of products purchased, monitor shipments, replace stock; and also prevent shoplifting of products like clothing, electronic devices, etc.

On the following pages there are examples of advances in technology being used today or in the design and development stage for future use.



**Biometric Digital Fingerprint Scanner** 

Biometric technology, requiring digital fingerprints and a photograph for identification, is used by the Department of State to establish and verify the identities of visa applicants at embassies and consulates around the world through its BioVisa program. The Department of Homeland Security established the US-VISIT program under which a traveler's biometrics are collected in his country, compared against a watch list of known criminals and suspected terrorists, and then verified again upon arrival in the United States. Biometrics are unique and virtually impossible to forge.



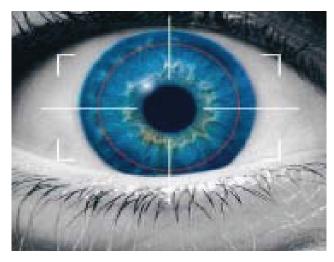
Hitachi Finger Vein Scanner

This is a new payment technology brought to us by Hitachi which makes your fingertip pay for transactions. This is a biometric cardless credit payment system, which adopts the uniqueness of the blood vessel patterns in each individual human body as the signature for payment authentication. The new biometric system is able to recognize pattern of the blood vessels in your fingers, so, what you need is to insert your finger for a scan to authenticate the credit card transactions. Blood vessels are hidden under the skin, which aren't like retinas or fingerprints and shouldn't be possible to counterfeit. In order for you to use your fingertip for making payment, you need to first register your finger vein pattern with the credit card company. The idea of cardless payment making use finger vein that has lowest counterfeit possibility is definitely good. A few of the common problems such as card loss and theft will be eliminated with this new system.



**Face Scan** 

If computers could recognize faces as easily as people they would make an ideal aid for spotting and tracking known terrorists and criminals. But face-recognition systems aren't that reliable yet. A company called Identix (IDNX) is making steady progress. Identix says that, by combining the usual face scan with an inspection of pores and wrinkles in small blocks of skin, has improved reliability.



Iris Scan



**Eye Scanner** 

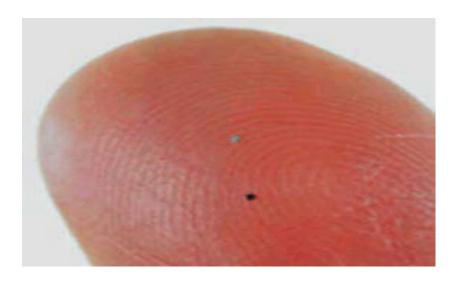
Iris scanning technology was first thought of in 1936 by ophthalmologist Frank Burch. He noticed that each person's iris – the part of the eye that gives color – is unique. It wasn't till 1994 when the algorithm for detecting these differences was patented by John Daugman of Iridian Technologies. Iris scans analyze the features in the colored tissue surrounding the pupil. There are many unique points for comparison including rings, furrows and filaments. The scans use a regular video camera to capture the iris pattern. The user looks into the device so that he can see the reflection of his own eye. The device captures the iris pattern and compares it to one in a database. Distance varies, but some models can make positive identification at up to 2 feet. Verification times vary - generally less than 5 seconds - but only require a quick glance to activate the identification process. To prevent a fake eye from being used to fool the system, some models vary the light levels shone into the eye and watch for pupil dilation – a fixed pupil means a fake eye. Iris scanners are now in use in various military and criminal justice facilities but have never gained the wide favor that

fingerprint scanners now enjoy even though the technology is considered more secure. Devices tend to be bulky in comparison to fingerprint scanners. Retinal scanners are similar in operation but require the user to be very close to a special camera. This camera takes an image of the patterns created by tiny blood vessels illuminated by a low intensity laser in the back of the eye – the retina. Retinal scans are considered impossible to fake and these scanners can be found in areas needing very high security. High cost and the need to actually put your eye very close to the camera prevent them from being used more widely.



**RFID Tags** 

RFID tags/chips are miniscule microchips. They listen for a radio query and respond by transmitting their unique ID code.



This black dot is a RFID chip

Most RFID tags have no batteries: They use the power from the initial radio signal to transmit their response. You should become familiar with RFID technology because you'll be hearing much more about it soon. Retailers adore the concept. Wal-Mart and the U.K.-based grocery chain Tesco are starting to install "smart shelves" with networked RFID readers. In what will become the largest test of the technology, consumer goods giant Gillette recently said it would purchase 500 million RFID tags from Alien Technology of Morgan Hill, Calif. It becomes unnervingly easy to imagine a scenario where everything you buy that's more expensive than a Snickers will sport RFID tags, which typically include a 64-bit unique identifier yielding about 18 thousand trillion possible values. KSW-Microtec, a German company, has invented washable RFID tags designed to be sewn into clothing. And according to EE Times, the European central bank is considering embedding RFID tags into banknotes.



**Privaris' PlusID75** 

Now this is an interesting key-fob-sized device designed to eliminate the need for employees to use multiple access cards and passwords. The plusID authenticates a user's identity with their fingerprint and enables secure access to buildings and other physical facilities, local and remote computers and networks, and online or onsite financial transactions. The plusID works with existing, installed security infrastructure, making deployment quick and affordable with just one secure wireless device. The plusID75 is the first product in Privaris' new plusID line of selfcontained biometric security products. In the coming months, Privaris will announce new plusID variations to address long-range vehicle gate access, government security initiatives (such as Personal Identity Verification or PIV), and authentication for financial and retail applications. The device, which is Bluetooth, proximity RF, and USB enabled, includes a fingerprint sensor, buttons for application selection, LED status indicators, an LCD for onetime password display, a USB connector, on-board fingerprint processing, cryptographic services, a rechargeable battery, and credential transmission capability at multiple RF frequencies.



Fujitsu palm-vein scanner



**Yarg Biometric Scanner** 

A Scottish school has turned to biometrics as part of a nationwide push to encourage children to eat healthier meals.

The cafeteria at Todholm Primary School in Paisley, Scotland, has gone cashless, and students are buying lunches by holding their hands over a palm-vein recognition unit produced by Glasgow-based Yarg Biometrics. It's the first school to use the system. Inside is the same palm-vein scanner from Japan's Fujitsu that can now be found on thousands of bank cash machines across Japan. The system relies on an infrared image of the palm of a user's hand. It reveals the pattern of veins present under the skin, and from this an algorithm can confirm identity of the user. It takes into account identifying features such as the number of veins, their position and the points at which they cross, and offers a higher level of security than competing technologies including voice print, facial recognition, fingerprint recognition and iris scan, according to Fujitsu. Yarg worked with Fujitsu to develop the palm-vein readers that are used in the school. Yarg discovered Fujitsu's palm-vein system and interfaced it with a keypad and other electronics to form the unit that kids see on the countertop. This is linked with a back office server that can verify the identity of each child and tie in with the food payment system. At the school in Paisley, there are four units linked to a back office server. Two of the units can be used by children to check their balance, and the other two are installed at the cafeteria checkout. When a student places his or her hand in front of the sensor, the system returns the child's credit balance within about three seconds.



**Full Body Scanner** 

Security checkpoint full body scanners. The full body scanner is not new, but it is needless to say that the concept of a full body x-ray doesn't sit too well with many people. The scanners are currently being tested at 10 different US airports, but the trial only involves offering the scanner as an alternative to a pat down in a secondary security search. The obvious question is whether the scanner can see "everything", and the answer is yes - the full body scanner will see all your "parts", the TSA tries to alleviate passenger concerns by moving the screener away from the machine, hidden away in a dark room. Your face is also blurred on the display, so there is no risk of TSA agents pointing at you while giggling like little school girls. Sadly, the truth is that the full body scanner is probably here to stay, and will eventually become the way all passengers are scanned at the

airport. There is no denying that the ability to see right through you and your clothes is the most effective way to scan for weapons or other unwanted items at the airport. Whether this technology will also involve you walking through with your bags is just a matter of time.



The Super Smart Card

E-Smart Technologies is a leading provider of high technology security systems that can be used to combat fraud and terrorism. E-Smart products enable government agencies and commercial enterprises to continuously and securely verify, certify and manage identification and access of citizens, personnel, customers and any other persons seeking physical or logical access. E-Smart is the exclusive provider of the Biometric Verification Security System(TM) (BVS2)(TM), featuring the Super Smart Card(TM) for Asia and the US, which experts believe to be the world's only commercially available smartcard with a full on-card matching system for biometric ID verification.



ActivCard, a specialist in IDentity Management software for remote access, announced an expanded cooperation with its partner Precise Biometrics AB, to deliver smart card-based identification (ID) badge solutions with biometric authentication. ActivCard has incorporated Precise Biometrics' technology for fingerprint matching on smart cards, "Precise Match-on-Card", to its "ActivCard Gold 2.2" software, the most successful and widely deployed smart ID card available on the market today. By verifying the fingerprint that's on the card, this method guarantees that the (the user's identity) never leaves the card, so it is not subject to theft.



## **Optical Memory Cards**

To facilitate local trade and provide convenience for inhabitants of border communities, the U.S. Department of State issues a B1/B2 Visa to Mexican citizens who wish to cross frequently into the U.S.A. This visa is issued in card form and is known as the Border Crossing Card (BCC). The BCC includes many of the same security features introduced for the Permanent Resident Card, such as micro images in the optical memory and the Embedded Hologram. Since the BCC's introduction, there has been no instance of a working counterfeit.



**Electronic Toll Collection** 

RFID tags are used for electronic toll collection at toll booths with Georgia's Cruise Card, California's FasTrak, Illinois' I-Pass, Oklahoma's Pikepass, the expanding eastern states' E-ZPass system (including Massachusetts's Fast Lane, New

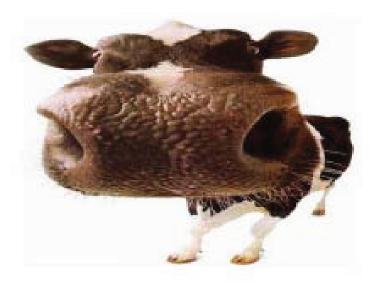
Jersey Turnpike, and the Maine Turnpike), Florida's SunPass, North Texas NTTA and Houston HCTRA EZ Tag, The "Cross-Israel Highway" (Highway 6), Philippines South Luzon Expressway E-Pass, Brisbane's Queensland Motorway E-Toll System in Australia, Autopista del Sol (Sun's Highway), Autopista Central (Central Highway), Autopista Los Libertadores, Costanera Norte, Vespucio Norte Express and Vespucio Sururban Highways. All highways in Portugal (Via Verde, the first system in the world to span the entire network of tolls) and France (Liber-T system). The tags, which are usually the active type, are read remotely as vehicles pass through the booths, and tag information is used to debit the toll from a prepaid account. The system helps to speed traffic through toll plazas as it records the date, time, and billing data for the RFID vehicle tag.



The Verichip

Verichip utilizes the implantable, passive RFID microchip in their solutions for the purpose of automatic identification. About the size of a grain of rice, the microchip inserts just

under the skin. In the future this chip may contain Global Positioning System (GPS) tracking capabilities Once inserted just under the skin, via a quick, outpatient procedure, the VeriChip™ can be scanned when necessary with a VeriChip reader. A small amount of radio frequency energy passes from the reader energizing the dormant microchip which then emits a radio frequency signal transmitting the individuals unique verification number.



Rfid Tattoo's

Somark Innovations, a company located in Saint Louis, has successfully tested an RFID tattoo, on cows, mice and rats: enabling an identifying number embedded under the skin. The system developed by Somark uses an array of needles to inject a pattern of dots into each animal, with the pattern changing for each injection. This pattern can then be read using a reader operating at high frequency. The ink can be either invisible or colored but Somark is keeping mum as to its exact contents. They only say that it doesn't contain any metals and is 100%

biocompatible and chemically inert. The tattoo can be applied in 5 to 10 seconds with no shaving involved and can be read from up to 4 feet away -- the bigger the tattoo, the more information stored.



**Security/Surveillance Cameras** 

170 surveillance cameras on one block! NYC now Camera City. In 2005, the NYCLU counted more than 4,000 street level cameras from the West Village down to Battery Park. The group also found that the 292 cameras along 125th Street in Central Harlem recorded nearly every movement on that busy street. "I would believe the number has dramatically increased" three years later, said Matt Faiella, staff attorney for the NYCLU. The cameras have myriad uses. The NYPD wants to install thousands to protect the city against terrorism. The NYPD's recently released plan to protect the city by installing some 3,000 additional cameras in the city raised concern at the NYCLU because it takes a new step in surveillance by creating a database of license plates and people's movements. The police said the images, including license plate captures, would be erased after 30 days.

47



**Various Dome Cameras** 



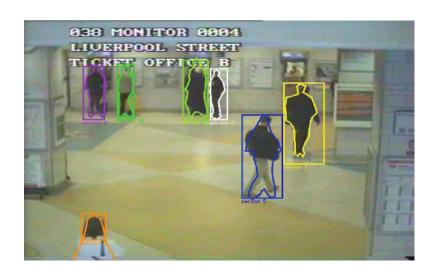
**Explosion Proof Camera** 

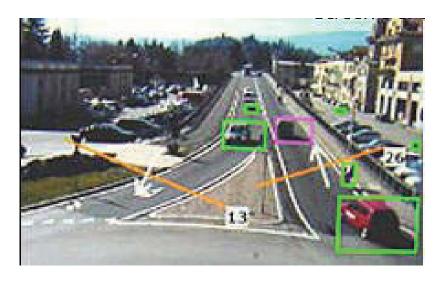
CCTV Security Cameras- CCTV is an acronym that stands for Closed Circuit Television. It is defined as the use of one or more cameras used for surveillance purposes. It was initially developed to increase bank security and has since spread to every corner of the security industry. Home security systems, businesses, corporations, organizations, and schools are several examples of locations that implement CCTV Security Systems. They produce high quality, exceptionally sharp color images, and have motion sensors that track movement across an area. They can pick a person out of a crowd and lock on them, tracing their movements; they can run at night because of infrared technology. The possibilities are endless for CCTV, especially as the technology continues to develop.



## **High Resolution IR Dome Camera**

A Vandalproof IR Dome Camera unlike any other. What makes the Hi-Res Sony HAD Vandalproof IR Dome Camera so effective is its tough design. Ideal for indoor or outdoor use, the Hi-Res IR Dome Camera is completely surrounded by a heavy-duty all-metal casing. Surrounding the camera is 24 infrared LED sensors that ensure outstanding image quality at a distance of up to 40 feet in any lighting situation – including near total darkness. The Hi-Res Sony HAD Vandalproof IR Dome Camera is always on guard – day or night – providing high-resolution images straight to a TV or monitor.





Video Surveillance Gets Smarter

Video surveillance gets smarter in Verbania, Italy. Verbania, the capital of the province of Verbano-Cusio-Ossola, Italy, was created when the towns of Intra and Pallanza merged. As one of the most idyllic and famous tourist destinations on Lake Maggiore, the town relies heavily on holidaymakers to fill its streets and generate income. To ensure the safety of visitors and citizens, the town council decided to launch a community surveillance project based on a system of network cameras. Monitors linked to the ten Sony SSNC-RX550 network cameras are installed in the Verbania Municipal Police control room, which is currently undergoing restructuring. Even so, the system does not require the intervention of dedicated security operatives. The human element only comes into play when real-time monitoring is needed (for example during a major event), or when an automatic alarm is triggered. The town's network cameras have been positioned so that they can monitor all arrival and escape points in every area of the town. Intelligent image

analysis functions now allow the city to keep special areas such as no-stopping zones under control. Using these features, live images can be monitored in unattended mode until suspicious activity occurs, at which point the operator is proactively alerted to the threat by means of an appropriate alarm. Here are a few quotes concerning this project.

"Sony has successfully integrated advanced image analysis processes into its network camera. Previously, this kind of analysis would have required the deployment of a central server, considerably raising the costs of implementing and managing the infrastructure. A medium-sized municipality such as Verbania might not be able to sustain such an expense. In this case, Sony has demonstrated its ability to harness a technology which its competitors have yet to master. It is not just the self-learning concept which has proved decisive; it is the fact that network cameras used for community surveillance have adopted technological innovations which were previously non-existent."



Sony SSNC-RX550 Network Camera

"The network cameras proposed by Sony represent the latest generation in surveillance technology," explained Security Consultant Mario Grippa. "You could describe them as intelligent or 'self-learning' cameras, in that once programmed, they can detect threats without human intervention. Although the cameras function locally and independently from one another, they are nevertheless interconnected. In fact each instrument is self-contained and can circle, record and manage images on a local basis. The entire system is programmed to carry out high-quality, continuous recording 24 hours a day, seven days a week. The smooth, clear images apply both to live displays and recorded footage. Furthermore, the lens quality of the SNC-RX550 cameras enables us to film objects and events at a distance of up to 200 metres."

"This type of technology will become the future of street surveillance and monitoring. By choosing Sony we knew we could count on an innovative partner that offered leading technological solutions. We were positively surprised by the image clarity, even in poor light. Today the Municipality of Verbania can rest assured that those who commit crime will be identified, thanks to technology which directly recognises objects and reads vehicle registration plates. In fact, our network cameras have been positioned so that they can monitor all arrival and escape points in every area of the town. Intelligent image analysis functions now enable us to keep special areas such as no-stopping zones

under control. Using these features, live images can be monitored in unattended mode until suspicious activity occurs, at which point the operator is proactively alerted to the threat by means of an appropriate alarm. This is why we opted for the Sony solution; it enabled us to implement a project which was previously unfeasible."



CyberExtruder Gets 2D to 3D Face Patent

CyberExtruder announced that the company had been granted a new patent on their process for creating reliable 3D models of a person's face from a single or series of 2D images. CyberExtruder's 2D-to-3D conversion is certainly an important innovation to the security and biometrics technology industries. Why? It enables better matching between offline photographs and surveillance video. While the matching of "watch list" images against surveillance video has traditionally achieved mixed results as a result of inadequate lighting, angle, expression, etc., this patent could signify a leap forward in terms of the quality and value of 3D facial images.



According to the NYPD, you won't even recognize that it's there, but high above the heads of New York City's citizens, there is a \$10 million special NYPD helicopter with an impressive arsenal of surveillance equipment inside it. The chopper, called "23", looks like a plain helicopter on the outside, but on the inside it is chock-full of hi-tech gadgetry, most of it intended to protect the people on the ground from terrorist attacks.



**Helicopter's Surveillance Cameras** 

New York Police Department surveillance helicopter's cameras, including one for infrared photography, are mounted below the aircraft. The chopper's arsenal of sophisticated surveillance and tracking equipment is powerful enough to stealthily read license plates - or even pedestrian's faces - from high above.

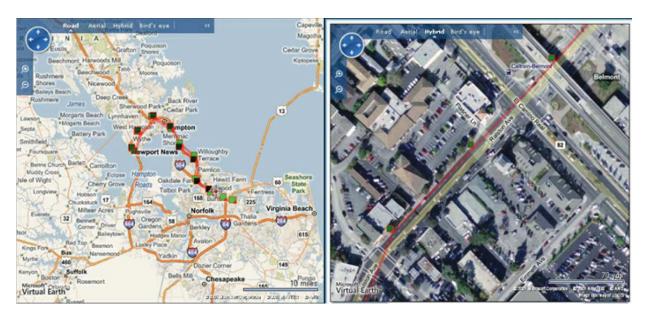




**Cuman Personal Tracking Devices** 

While Orwell's 1984 suggested that human surveillance and tracking would be an integral part of a dystopian future, the reality looks to be quite different, with people quickly embracing GPS technology and the myriad of uses such technology provides. The last few years has seen a range of tracking devices that use GPS to keep track of everything from products and pets to loved ones. The latest player to enter the field is South Korea electronics company Cuman with its range of tracking devices. The model drawing the most attention from Cuman's personal trackers is the CP-100G. Cuman describes the white patch-type tracker as a P2P solution – no, it can't be used to download pirated movies over Peer to Peer networks. In this case, P2P stands for a person-to-person application. This means it does not require an operation center to report the location of whatever it is being tracked to the user. Using

SMS or TCP-IP, the tracker's location can be reported directly to a PDA, PC or mobile phone. Since the software is free and the P2P solution enables the unit to link to a freeware Google map, there is no service charge for using the tracking service. Cuman's range of devices also includes the CW-100G, which manages to cram a tracking device into a wristwatch – just the sneaky thing to keep track of little Jimmy without him knowing. The devices run for up to 72 hours on a single charge of their Li-ion battery and include an SOS button that can be programmed to send a location and emergency message to pre-assigned agencies or parents. Additionally, through the use of a customizable "Geo Fence", the devices will send out an alert when the unit goes beyond a pre-set safety zone. The patch-type CP-100G includes USB port and SIMM slot, measures 40 x 30 x 17mm and weighs 26g, while the wristwatch CW-100G measures just 39.5mm in diameter and 17.5mm in height.



(GPS) Global Positioning System Tracking



**Enhanced Driver's Licenses** 

Vermont has become the third state to begin issuing enhanced driver's licenses with radio frequency tags that also serve as official identification cards at U.S. border crossing points. It did so under a program authorized by the Homeland Security Department. The Vermont Department of Motor Vehicles began accepting applications for the enhanced licenses through its Montpelier office. The new card is voluntary and costs \$25 more than a standard license. New York, Washington State and British Columbia in Canada offer similar licenses designed to comply with DHS' Western Hemisphere Travel Initiative, which goes into effect in June, 2009. Officials in Arizona, Michigan, Manitoba, Ontario and Quebec have indicated they intend to issue similar cards. The enhanced drivers licenses have embedded radio frequency identification (RFID) chips that can be scanned at a distance of 20 to 30 feet at U.S. border crossings. The RFID chips in the licenses emit a reference number that must be checked against a DHS database to obtain personal information.

57



## A smart, multifunctional identity card of the future?

The Troika card, a concept for a smarter Social Security card with a multifunctional screen that turns your identity card into a gadget. Made of lightweight aluminum, the Troika card is durable but also flexible. A multifunctional screen allows users to switch between driver's license, passport, and Social Security card. Thumbprint identification serves as protection against identity theft. By combining the familiarity and proportions of a standard ID card with the durability of a water-resistant, flexible screen and the security of biometrics, a card like this could revolutionize the future of identification.

#### Here are the features in detail:

- 1. Thanks to the thumbprint reader, only the owner of the card is able to activate it.
- 2. The material of the Color E Ink display scanner is thin film used in electronic displays.

- 3. Buttons allow the user to select between Social Security, driver's license, and passport information.
- 4. The sturdy yet light aluminum body will last much longer than a typical plastic card.
- 5. The water-resistant cover keeps the card shiny and protects it from the elements.



**Encrypted Flash Disk Detects Living Tissue** 

USB flash disks with biometric fingerprint sensors are a dime a dozen. So what makes the Sellgino Dragon Security biometric drive unique? It may be the first biometric-enabled flash disk to use a fingerprint sensor that detects the live skin layer. Sensors found on other devices scan only the surface of the finger, which means that if your hand is dirty you might be locked out of your disk. In fact, even fingers that are too dry can compromise the detection rate of normal biometric sensors. By seeking the live layer of the skin, the Dragon Security has a much higher accuracy rate even if you fail to wash your hands after eating chocolate. It doesn't require any driver installation on Windows XP or Vista and can store up to 10 fingerprints.

59



Laser beam spy camera joins war on terrorism

A laser that can scan a crowd and identify people who have been handling explosives is being secretly tested at British airports and railway stations. The device - no bigger than a shoe box - could also be used by police and MI5 surveillance teams to identify Islamic terrorists outside mosques or community centres. The laser can pick out suspects in large crowds and highlight explosive residue on their clothing and luggage. Professor John Tyrer, of Loughborough University, who helped to develop the equipment, said: "When you handle an explosive, the chemicals -such as Semtex and TNT - leave traces. With this technology we are able to see this telltale residue and identify possible suspects. Using laser technology we can see the explosives on people's clothes, on their hands or on items like backpacks such as those used by the July 7 London bombers." He added: "This equipment could be carried by surveillance teams or could be set up to monitor a street, a railway, airport terminal or national stadium." When the equipment scans a crowd, it alerts an operator when explosive particles are detected.



**Echelon (signals intelligence)** 

"Trillions of bytes of textual archive and thousands of online users, or gigabytes of live data stream per day that are filtered against tens of thousands of complex interest profiles"

Echelon is a system used by the United States National Security Agency (NSA) to intercept and process international communications passing via communications satellites. It is one part of a global surveillance systems that intercept messages from the Internet, from undersea cables, from radio transmissions, from secret equipment installed inside embassies, or use orbiting satellites to monitor signals anywhere on the earth's surface. The system includes stations run by Britain, Canada, Australia and New Zealand, in addition to those operated by the United States. Although some Australian and British stations do the same job as America's Echelon sites, they are not necessarily called

61

"Echelon" stations. But they all form part of the same integrated global network using the same equipment and methods to extract information and intelligence illicitly from millions of messages every day, all over the world. The system works by indiscriminately intercepting very large quantities of communications and using computers to identify and extract messages of interest from the mass of unwanted ones. A chain of secret interception facilities has been established around the world to tap into all the major components of the international telecommunications networks. Some monitor communications satellites, others land-based communications networks, and others radio communications. ECHELON links together all these facilities, providing the US and its allies with the ability to intercept a large proportion of the communications on the planet. The computers at each station in the ECHELON network automatically search through the millions of messages intercepted for ones containing pre-programmed keywords. Keywords include all the names, localities, subjects, and so on that might be mentioned. Every word of every message intercepted at each station gets automatically searched whether or not a specific telephone number or e-mail address is on the list. The thousands of simultaneous messages are read in "real time" as they pour into the station, hour after hour, day after day, as the computer finds intelligence needles in telecommunications haystacks. According to its website, the USA's National Security Agency is "a high technology organization... on the frontiers of communications and data processing".

Although the largest surveillance network is run by the US NSA, it is far from alone. Russia, China, France and other nations operate worldwide networks. Dozens of advanced nations use signals intelligence ("sigint") as a key source of intelligence. Even smaller European nations such as Denmark, the Netherlands or Switzerland have recently constructed small, Echelon-like stations to obtain and process intelligence by eavesdropping on civil satellite communications.

"In Europe, we talk about the four freedoms of the Union -freedom for the flow of information, of the mobility of people,
freedom of goods and freedom of services -- but there is a
fifth freedom: Intelligence. Nations want to retain the
freedom to spy." -- A European Commission official, October
1998.

# **Current trends towards Globalization and A One World Economy**



Corporate citizenship In the world economy.

Transnational Corporations exert a great deal of power in the globalized world economy. Many corporations are richer and more powerful than the states that seek to regulate them. Through mergers and acquisitions corporations have been growing very rapidly and some of the largest TNCs now have annual profits exceeding the GDPs of many low and medium income countries.



The United Nations

The United Nations Global Compact, also known as Compact or UNGC. The UN Global Compact is the world's largest corporate citizenship and sustainability initiative. Since its official launch on 26 July 2000, the initiative has grown to more than 6200 participants, including over 4700 businesses in 120 countries around the world.

64

It is a network-based initiative with the Global Compact Office and six UN agencies at its core. Here's a brief history of the U.N. The name "United Nations", coined by United States President Franklin D. Roosevelt, was first used in the "Declaration by United Nations" of 1 January 1942, during the Second World War, when representatives of 26 nations pledged their Governments to continue fighting together against the Axis Powers. The forerunner of the United Nations was the League of Nations, an organization conceived in similar circumstances during the first World War, and established in 1919 under the Treaty of Versailles "to promote international cooperation and to achieve peace and security." The International Labour Organization was also created under the Treaty of Versailles as an affiliated agency of the League. The League of Nations ceased its activities after failing to prevent the Second World War. In 1945, representatives of 50 countries met in San Francisco at the United Nations Conference on International Organization to draw up the United Nations Charter. Those delegates deliberated on the basis of proposals worked out by the representatives of China, the Soviet Union, the United Kingdom and the United States at Dumbarton Oaks, United States in August-October 1944. The Charter was signed on 26 June 1945 by the representatives of the 50 countries. Poland, which was not represented at the Conference, signed it later and became one of the original 51 Member States. The United Nations officially came into existence on 24 October 1945, when the Charter had been ratified by China, France, the Soviet Union, the United Kingdom, the United States and by a majority of other signatories.

65

And with the assistance of the UN Global Compact, today the United Nations is now aiding globalism. Never before in history has there been a greater alignment between the objectives of the international community and those of the business world. Common goals, such as building markets, combating corruption, safeguarding the environment and ensuring social inclusion, have resulted in unprecedented partnerships and openness between business, governments, civil society, labour and the United Nations. Launched in July 2000, the UN Global Compact is a both a policy platform and a practical framework for companies that are committed to sustainability and responsible business practices. The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. By doing so, business, as the primary agent driving globalization, can help ensure that markets, commerce. technology and finance advance in ways that benefit economies and societies everywhere and contribute to a more sustainable and inclusive global economy. The UN Global Compact is not a regulatory instrument, but rather a voluntary initiative that relies on public accountability, transparency and disclosure to complement regulation and to provide a space for innovation.

<sup>&</sup>quot;We need business to give practical meaning and reach to the values and principles that connect cultures and people everywhere." — Ban Ki-moon, Secretary-General of the United Nations



"The technotronic era involves the gradual appearance of a more controlled society. Such a society would be dominated by an elite, unrestrained by traditional values. Soon it will be possible to assert almost continuous surveillance over every citizen and maintain up-to-date complete files containing even the most personal information about the citizen. These files will be subject to instantaneous retrieval by the authorities." –Zbigniew Brzezinski. founder of The Trilateral Commission

### **World Trade Organization (WTO)**

We are writing the constitution of a single global economy.

—former WTO Director, General Renato Ruggiero

"It was utterly outrageous. Wealthy countries exploited their power to spin the agenda of big business. The issue of multinational corporations as a cause of poverty was not even on the agenda; it was like a conference on malaria that does not discuss the mosquito."—Mark Curtis, Christian Aid's head of policy, about the WTO meeting in Quatar 2001

Established in 1995, the World Trade Organization (WTO) is a powerful new global commerce agency, which transformed the General Agreement on Tariffs and Trade (GATT) into an enforceable global commerce code. The WTO is one of the main mechanisms of corporate globalization. Assisting the WTO is its sister organizations the International Monetary Fund (IMF) and the World Bank (WB). Under the WTO's system of corporate-managed trade, economic efficiency, reflected in short-run corporate profits, dominates other values. Decisions affecting the economy are to be confined to the private sector, while social and environmental costs are borne by the public. Privatization is the transfer of power to operate basic services such as water, education, electricity and healthcare from government control to private companies. These basic services, regarded as human rights by many in the world, have now become markets sought out by corporations from the US and Europe who are looking to make a profit.

"Citizens beware. An unprecedented corporate power grab is underway in global negotiations over international trade."

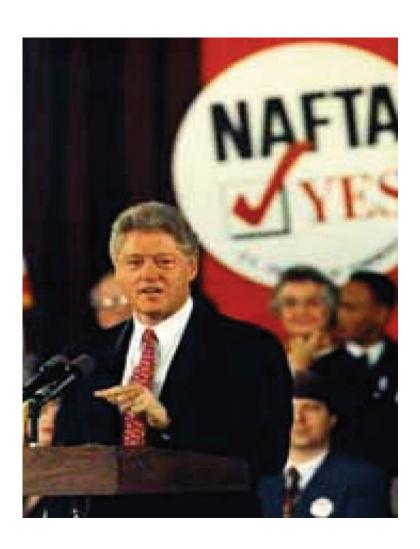
—Ralph Nader, "Free Trade and the Decline of Democracy,"
1993



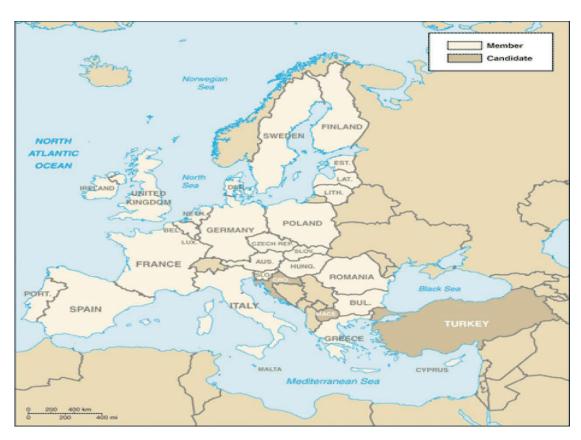
**North American Free Trade Agreement (NAFTA)** 

The North American Free Trade Agreement (NAFTA) is a regional trade agreement among the governments of Canada, Mexico, and the United States traces its beginnings from many paths. One early dating goes back to the 1979 Trade Act which called for study on the possibility of a free trade area around the Americas. Throughout the 1980s, economic problems, including heavy international debt burdens, precluded trade liberalization policies in Mexico. U.S. trade negotiations turned north, and by 1989 a U.S.-Canada Free Trade Agreement (FTA) had been negotiated, signed, and implemented. Using the FTA as a starting point, the Bush administration once again began seeking a southen link in the North American trade equation, and in 1990 they reached agreement with the Mexican government to pursue

the negotiations. Canada joined the negotiations, and by late 1992, the North American Free Trade Agreement was completed, allowing for signature by year's end. The Clinton administration assumed office in January of 1993, already on record as supporting Congressional ratification of NAFTA. In November of 1993, Congress passed the North American Free Trade Agreement (NAFTA) despite widespread popular opposition. Several weeks before the 1993 vote, opponents of NAFTA had gathered a slim majority of the votes. Yet NAFTA ultimately passed. NAFTA entered into force on January 1, 1994.



"A day will come when all nations on our continent will form a European brotherhood...A day will come when we shall see... the United States of America and the United States of Europe face to face, reaching out for each other across the seas." *Victor Hugo - 1848* 



The European Union

In 1950 the European Coal and Steel Community was proposed as a means of achieving economic unification in Europe following the war. The hope was that this would strengthen economic trade in Europe. This unified effort led to the signing of the treaties of Rome in 1957, which established the European Economic Community (EEC), and the European Atomic Energy Council.

That treaty was taken a step further with the signing of the Brussels Treaty in 1965. The Brussels Treaty began the process of rebuilding the old Roman Empire through reunification of European states under one political system, one economic system, and eventually under the protection of one military force. The treaty established a commission, council, parliament, and court for the union. More states were added to this growing union in 1973, 1981, and 1986, making up the 10 permanent member states of today's European Union.



The headlines stated "Europe Is United Again", 2004. 10 nations in eastern Europe and Mediterranean join bloc. Europe stood proudly reunited yesterday almost six decades after it was split in two by the Cold War, as 10 nations in eastern Europe and the Mediterranean took their places in the European Union. The once-communist states of the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia officially joined the EU family.

Mediterranean islands Cyprus and Malta joined them as well, rounding out what is indisputably the world's biggest single economic bloc, and a fledgling political force, with a total population of 455 million, the EU now surpasses the United States as the world's biggest economy. Currently the European Union is composed of 27 independent sovereign states which are known as member states: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. Today's European Union has a president and a military. Its citizens also have a common passport.



The E.U.'s Flag

The purpose of the EU's creation was and is, ultimately, to create a European super-state or "United States of Europe", as some have suggested naming it, that would eventually rival the United States in influence and military might.

73



German Chancellor Angela Merkel, vowed to unite all of Europe under one single constitution. Of course, this in effect would wipe out the National Sovereignty of every country in the European Union. European Union leaders adopted a 50th anniversary declaration setting 2009 as the deadline for a new treaty to replace its rejected constitution.

The "Berlin Declaration" was signed by German Chancellor Angela Merkel, European Commission President Jose Manuel Barroso and the president of the European Parliament, Hans-Gert Poettering, as EU leaders looked on.

There are four important aspects of the revised EU constitutional treaty. 1. It would give the EU the constitutional form of a state for the first time and make us all real and not just honorary citizens of this EU state: 2. It would give the EU more law-making powers: 3. It would give the big states more weight and small and middle-sized states less weight in making EU laws: 4. It would remove the right to a permanent EU commissioner. This would prevent each member state from being represented at all times on the EU Commission.



The Euro

Its the currency of 13 European Union countries: Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Slovenia and Finland. The Euro is a symbol of European identity and a vital part of the process of political integration. The idea behind the single currency is that getting rid of national currencies would make the operation of a single market easier and provide for greater economic stability. This requires the EU to become what economists call an optimal currency area, which effectively operates as one economy. Euro notes look the same wherever you are in the EU (*European Union*) - they come in denominations of 5, 10, 20, 50, 100, 200 and 500 Euros. The coins have different national images on the reverse side. Coins and notes issued in any EU country can be used in any other.

"[the Euro is] a tool to help us master globalisation and help us resist irrational shifts in the market'. - Dominique Strauss-Kahn, French finance minister, 1997-1999



**An Unfinished Tower** 

And they said one to another, Go to, let us make brick, and build us a city and a tower. Return of the Tower of Babel? Above is an illustration of the one of the buildings of the European Parliament in Strasbourg France, the Louise Weiss Building, which includes a tower that appears to be unfinished. On the left is a painting done in 1563 of the Tower of Babel, by Pieter Brueghel the Elder, a Flemish Northern Renaissance Painter. Posters produced by the European Union symbolically depict their goal. The motto of Europe: Many Tongues One Voice. Genesis 11:1-9 And the whole earth was of one language, and of one speech. And it came to pass, as they journeyed from the east, that they found a plain in the land of Shinar; and they dwelt there.

And they had brick for stone, and slime had they for morter. And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth. And the LORD came down to see the city and the tower, which the children of men builded. And the LORD said, Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do. Go to, let us go down, and there confound their language, that they may not understand one another's speech. So the LORD scattered them abroad from thence upon the face of all the earth: and they left off to build the city. Therefore is the name of it called Babel; because the LORD did there confound the language of all the earth: and from thence did the LORD scatter them abroad upon the face of all the earth.





U.K.'s prime minister Gordon Brown announced the creation of a "new world order" after the conclusion of the G20 summit of world leaders in London. The Prime Minister claimed to have struck a "historic" deal to end the global recession as he unveiled plans to plough more than \$1 trillion into the world economy.

"This is the day that the world came together to fight back against the global recession," he said. "Not with words but with a plan for global recovery and reform."

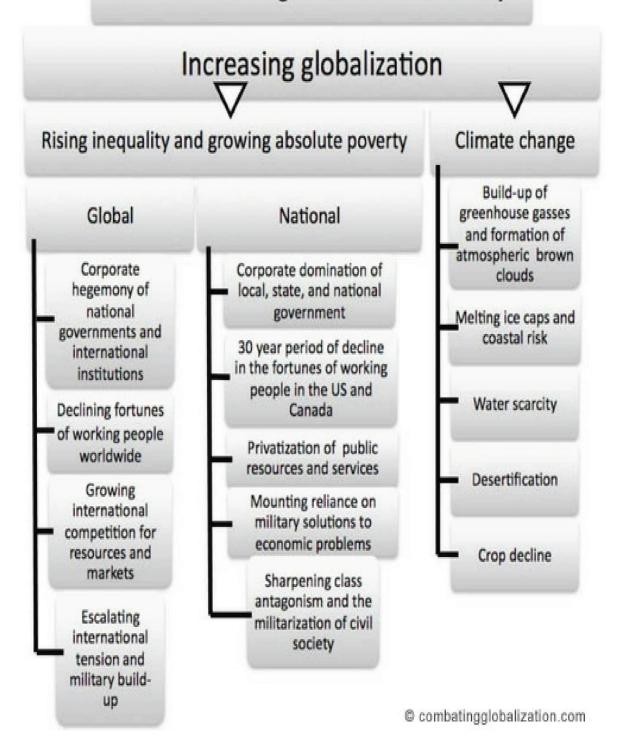
One trillion dollars will be made available to the IMF and, in turn, to countries threatened by the downturn. However, Mr Brown made it clear that he did not intend to apply for funds for Britain, despite opponents warning that the country will soon need a bail-out due to the growing deficit in the public finances. April, 2009



China's Yuan

Recently China's central bank proposed replacing the US dollar as the international reserve currency with a new global system controlled by the International Monetary Fund. In an essay posted on the People's Bank of China's website, Zhou Xiaochuan, the central bank's governor, said the goal would be to create a reserve currency "that is disconnected from individual nations and is able to remain stable in the long run, thus removing the inherent deficiencies caused by using credit-based national currencies". China is positioning its currency for a run at world supremacy. The yuan is gaining global influence, but experts say it would be years before it could supplant the U.S. dollar. In a series of what might be called baby steps, Chinese officials recently have moved to globalize the yuan and promote its influence overseas, with Shanghai designated as command central. Since last December, China has signed deals with six countries, including South Korea, Malaysia and most recently Argentina, for currency swaps that would inject Chinese money into foreign banking systems. That would allow foreign companies to pay for goods they import from China in yuan, bypassing the dollar -- the currency that dominates international trade and finance, including foreign exchange reserves. April, 2009 79

## Matrix 1: Global Megatrends of the 21st Century



Possibly leading us towards a single global market are current or future economic and political union's or blocs that allow for free movement of people and goods.

A common market is a customs union with common policies on product regulation, and freedom of movement of the factors of production (capital and labour) and of enterprise. The goal is that movement of capital, labour, goods, and services between the members is as easy as within them.

Sometimes a single market is differentiated as a more advanced form of common market. In comparison to common a single market envisions more efforts geared towards removing the physical (borders), technical (standards) and fiscal (taxes) barriers among the member states. These barriers obstruct the freedom of movement. A single market has many benefits. With full freedom of movement for all the factors of production between the member countries, the factors of production become more efficiently allocated, further increasing productivity.

### List of single markets

- \* Andean Community (CAN) 31 December 2005
- \* Caribbean Community single market (CARICOM)
- \* Central American Common Market (CACM)
- \* Economic and Monetary Community of Central Africa (CEMAC)

- \* European Economic Area (EEA) between the EC, Norway, Iceland and Liechtenstein
- \*The European Union (EU) began life as the European Coal and Steel Community in 1951 (Treaty of Paris (1951)) and went on to become the European Economic Community (EEC) in 1957 (Treaty of Rome (1957)) (when it became known in Britain and Ireland as "the Common Market"). The abolition of internal tariff barriers was achieved in 1968. In subsequent years little was done to move from this basic customs union to a full single market. The Single European Act was signed in 1986 to establish a Single European Market by 1993, by removing the barriers to free movement of capital, labour, goods and services.
- \* West African Economic and Monetary Union (WAEMU) 10 January 1994

## **Proposed**

- \* Eurasian Economic Community (EAEC) 1 January 2010
- \* Southern African Development Community (SADC) 2012
- \* Southern Common Market (Mercosur) 2015
- \* ASEAN Economic Community (AEC) 2020
- \* African Economic Community (AEC) 2023
- \* Gulf Cooperation Council (GCC)
- \* North American Union (NAU)
- \* Economic Community of West African States (ECOWAS)
- \* Economic Community of Central African States (ECCAS)
- \* South Asia Free Trade Agreement (SAFTA)

| Monetary Union   | Currency<br>Name                             | Code | Member Countries  |
|--|--|------|---|
| Eurozone   | Euro   | EUR  | Austria, Belgium, Cyprus, Finland,<br>France, Germany, Greece,<br>Ireland, Italy, Luxembourg, Malta,<br>Netherlands, Portugal, Slovakia,<br>Slovenia, and Spain |
| East Caribbean Currency Union  | East<br>Caribbean<br>Dollar                  | XCD  | Anguilla, Antigua & Barbuda,<br>Dominica, Grenada, Montserrat,<br>Saint Kitts & Nevis, Saint Lucia,<br>Saint Vincent & the Grenadines                           |
| UEMOA ( <i>Union Économique et Monétaire Ouest Africaine</i> , or "West African Economic and Monetary Union")                        | CFA franc<br>BCEAO (West<br>African Franc)   | XOF  | Benin, Burkina Faso, Côte<br>d'Ivoire, Guinea-Bissau, Mali,<br>Niger, Senegal, and Togo   |
| CEMAC (Communauté<br>Économique et Monétaire de<br>l'Afrique Centrale, or "Economic<br>and Monetary Community of<br>Central Africa") | CFA franc<br>BEAC (Central<br>African Franc) | XAF  | Cameroon, Central African<br>Republic, Chad, Republic of the<br>Congo, Equatorial Guinea and<br>Gabon   |
| IEOM ( <i>Institut d'Émission</i><br><i>d'Outre-Mer</i> , or "Overseas<br>Issuing Institute")  | CFP franc<br>(French Pacific<br>Franc)       | XPF  | French Polynesia, New Caledonia,<br>and Wallis & Futuna   |

# **Currency Unions**

The five currency unions and 81 independent currencies cover a total of 122 countries that make up 98.4% of the world's GDP and 86.1% of the world's population.

In 1999, economist Judy Shelton addressed the US House of Representatives Committee on Banking and Financial Services. In her testimony, she stated that, "The continued expansion of free trade, the increased integration of financial markets and the advent of electronic commerce are all working to bring about the need for an international monetary standard---a global unit of account." She further explained that, "Regional currency unions seem to be the next step in the evolution toward some kind of global monetary order. Europe has already adopted a single

currency. Asia may organize into a regional currency bloc to offer protection against speculative assaults on the individual currencies of weaker nations. Numerous countries in Latin America are considering various monetary arrangements to insulate them from financial contagion and avoid the economic consequences of devaluation. An important question is whether this process of monetary evolution will be intelligently directed or whether it will simply be driven by events. In my opinion, political leadership can play a decisive role in helping to build a more orderly, rational monetary system than the current free-for-all approach to exchange rate relations." She further stated that, "As we have seen in Europe, the sequence of development is (1) you build a common market, and (2) you establish a common currency. Indeed, until you have a common currency, you don't truly have an efficient common market." She concludes by stating, "Ideally, every nation should stand willing to convert its currency at a fixed rate into a universal reserve asset. That would automatically create a global monetary union based on a common unit of account. The alternative path to a stable monetary order is to forge a common currency anchored to an asset of intrinsic value. While the current momentum for dollarization should be encouraged, especially for Mexico and Canada, in the end the stability of the global monetary order should not rest on any single nation."

Economist Robert A. Mundell has long called for a global currency. On his website, he states that the creation of a global currency is "a project that would restore a needed coherence to the international monetary system, give the International Monetary Fund a function that would help it to promote stability, and be a catalyst for international harmony." He states that, "The benefits from a world currency would be enormous. Prices all over the world would be denominated in the same unit and would be kept equal in different parts of the world to the extent that the law of one price was allowed to work itself out. Apart from tariffs and controls, trade between countries would be as easy as it is between states of the United States."



"A global economy requires a global currency."

— Paul Volcker, former Chair of the US Federal Reserve.

"I see in the near future a crisis approaching that unnerves me and causes me to tremble for the safety of my country. As a result of the war, corporations have been enthroned and an era of corruption in high places will follow, and the money power of the country will endeavor to prolong its reign until all wealth is aggregated in a few hands, and the Republic is destroyed. I feel at this moment more anxiety for the safety of my country than ever before, even in the midst of the war." President Abraham Lincoln, Letter to Col. William F. Elkins, November 21, 1864

## Conclusion

And I heard a great voice out of the temple saying to the seven angels, Go your ways, and pour out the vials of the wrath of God upon the earth. And the first went, and poured his vial upon the earth; and there fell a loathsome and malignant sore upon the men which had the mark of the beast, and upon them which worshipped his image. Revelation 16:1,2

By one getting a Verichip implant or maybe even a rfid devise be the reason for people receiving the "loathsome and malignant" sore mentioned in Revelation Chapter 16? There are some recent studies that seem to suggest that a rfid devise implanted under one's skin can cause cancer. After a review of studies published in veterinary and toxicology journals between 1996 and 2006, the AP found that rfid chips "induced malignant tumors in some lab mice and rats." "The transponders were the cause of the tumors," Keith Johnson, a retired toxicologic pathologist, told the AP in a phone interview about one 1996 study that he led.

"There's no way in the world, having read this information, that I would have one of those chips implanted in my skin, or in one of my family members," said Dr. Robert Benezra, head of the Cancer Biology Genetics Program at the Memorial Sloan-Kettering Cancer Center in New York in an AP article.

How does the microchip implant cause cancer? Researchers have proposed several explanations for the cancerous tumors found around microchip implants in animals, as follows:

Foreign-Body Tumorigenesis: The presence of a foreign body under the skin may cause cellular changes that lead to cancer.

Post-Injection Sarcoma: Inflammation from the chip-injection procedure may give rise to cancer.

Possible Genotoxic Properties of the Implant: The microchip may have carcinogenic properties or cause the body to produce carcinogenic byproducts.

Radio-Frequency Energy Emissions from the Transponder or Reader: The radio-frequency energy involved with the device may contribute to tumor formation.

Are the microchips that caused these tumors the same as the VeriChip human implant? Yes, the microchips that caused cancer in animals are virtually identical to the implant being marketed for humans. Digital Angel, the parent company of the VeriChip Corporation, manufactures both the HomeAgain animal implant and the VeriChip human implant.

"And I saw thrones, and they sat upon them, and judgment was given unto them: and I saw the souls of them that were beheaded for the witness of Jesus, and for the word of God, and which had not worshipped the beast, neither his image, neither had received his mark upon their foreheads, or in their hands; and they lived and reigned with Christ a thousand years". After this vision John "saw a great white throne, and him that sat on it, from whose face the earth and the heaven fled away; and there was found no place for them. And I saw the dead, small and great, stand before God; and the books were opened: and another book was opened, which is the book of life: and the dead were judged out of those things which were written in the books, according to their works. And the sea gave up the dead which were in it; and death and hell delivered up the dead which were in them: and they were judged every man according to their works".

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