

# GLOBALIZATION IN WORLD HISTORY

Second Edition

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### 30 Emerging Patterns of Contact

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### 1000 CE AS TURNING POINT

#### The Birth of Globalization?

Something of a watershed in interregional contacts occurred about a thousand years ago. The date, 1000 CE, is simply a convenient marker—nothing really dramatic occurred in that year, or even that century, and few people at the time would have been aware of any particularly significant alteration or upsurge in global relations. But by 1000 CE a number of key changes had accumulated, over the course of about three hundred years; and after that date the changes would solidify and amplify, justifying the understanding, in retrospect, that a fundamental transition was underway.

One world historian, David Northrup, has put the case particularly vividly: before 1000 CE, the most important factors shaping human life and social institutions were regionally separate, within each major society, with contacts playing only a peripheral role amid divergent patterns. After 1000 CE, in contrast, societies increasingly functioned as a result of contacts, communications, and even deliberate imitations, so that world history becomes the story of convergence rather than separation. Of course, what happened by around 1000 CE built upon previous contacts, most notably in trade relationships and the motivations they had embodied, particularly during the classical period and then amid the initial spread of the world religions. But the new patterns were not merely an automatic extension of what had already taken shape: they involved real and measurable departures. This chapter, obviously, focuses on this theme of change, but also on some crucial limitations to change.

For the idea of a major break in world history, such that what went before must be handled society by society, whereas what went after can increasingly be handled in terms of mutual interactions, has direct bearing on the issue of globalization. If 1000 is the turning point for interregional convergence, then subsequent changes, however significant, must be seen as aftershocks, resulting

from the momentum of the decisive shift. And indeed, many world historians do view globalization as simply the latest version of a process that is now a millennium old.

No one, to be sure, puts the label globalization on the changes that took shape during the centuries after the end of the great classical empires. At most, historians who see this period as a crucial turning point talk of “archaic” globalization, or of “protoglobalization.” Among other things, the networks that developed were Afro-Eurasian, not truly global—for the Americas and Pacific Oceania remained isolated from the larger interregional currents. But the identification of a process that involved such intense and fruitful contacts that its further development became inevitable—so that the extension to the whole world, while itself a significant further change, built on established patterns—might justify the conclusion that the effective origins of globalization really date this far back in historical chronology. After all, the voyages that brought the Americas into the global picture for the first time were intended not to discover new lands but to shorten the connections between Europe and Asia—intended, in other words, to take advantage of existing interregional ties.

The idea of the 1000s as the beginnings of global linkage, in strong contrast to previous and more sporadic connection, risks becoming a historian’s abstraction. The challenge is to demonstrate not only change, but significant change, and to show what this all meant in human terms. For not only is there no dramatic event to mark the divide between separateness and convergence; there is also no overwhelming new technology, no communications revolution of the sort we associate with more modern phases of globalization. The shift, instead, resulted from an accumulation of developments in shipping, in trade routes, and in cultural outreach—and accumulation, though the basis for most major departures in history, is never as vivid as a single transformative invention or some upheaval in foreign policy or war.

Happily, nevertheless, the chronological divide is not just a theoretical construct or even an organizing device for textbooks (though that’s true too, as historians increasingly realize the ramifications of the change), for it has a concrete human face.

It was only in the centuries after 1000, for example, that wide-ranging interregional travel took shape. Whereas during the classical period there is record, and uncertain at that, of only one trip between Europe and China, by the 13th and 14th centuries a substantial number of travelers went from Europe or North Africa to East Asia. Some were missionaries, some merchants, some adventurers or job-seekers, and there were even some entertainers involved. The world’s greatest known traveler, Ibn Battuta, operated in this context, with many trips from his native Morocco to the Middle East, Central Asia, India, China and Southeast Asia, and sub-Saharan Africa, logging almost 80,000 miles on his journeys overall. Travel of this sort reflected a new capacity to take advantage of established routes and contacts and a new interest in reaching

out as widely as possible in the known world. It also supported further travel in turn, for some of the new adventurers, including Ibn Battuta, wrote accounts of their trips which helped a wider audience learn about other parts of the world and could spur some to outreach of their own. It was no accident that Christopher Columbus, on his own travels late in the 15th century, had with him a copy of the most famous European travel book to that point, Marco Polo’s description of his journey to China. Long-distance travel was still the province of a relatively small number of individuals, and of course it was noteworthy that the more extensive ventures went west to east rather than vice versa; but the phenomenon was no longer simply a rarity, and that fact in turn signaled the beginning of a new era in terms of interregional contacts.

Mapping came of age by around 1000 CE, with increasingly accurate representations of Asia, Europe, and much of Africa. Arab mapmakers led the way, which reflected larger Arab leadership in the processes of trade and travel. But mapmakers from other societies joined in, based on knowledge of Arab maps and guides and on travel from their own home bases. Fanciful representations even of neighboring regions, common still in the classical period, gave way to more precise detail. Better maps, in turn, facilitated additional contacts, showing the attainability of far-flung destinations.

Dependence on long-distance trade also increased, another sign of change. Markets for Chinese silk continued to play an important role, which represented obvious continuity with the past. But the range of Chinese exports expanded, for example to include porcelain. Chinese consumers began to count on imports of tea and some other food specialties from Southeast Asia. Imports of African slaves to the Middle East became a regular trade item (and ultimately, over several centuries, over nine million people would be brought in from eastern Africa). Indian cotton cloth became a valued commodity in markets as distant as Japan, gaining attention from European merchants as well by the 13th and 14th centuries. By the 14th century European interest in imported sugar (which could not be locally grown) began to surface, and would ultimately help spur increased European involvement in global outreach more generally. Some of the products now central to interregional trade also began to move below purely elite consumer levels, to involve wider reaches of the population. Correspondingly, some regions—for example, parts of China during the Song dynasty (960–1279)—began to depend heavily on production for the export trade. The impact of the interregional economy, with increasingly active exchanges among Asia, Africa, and Europe, began to accelerate, moving beyond the levels of some surplus production and the interests of a few merchant groups.

Recent discoveries of ships from the period, which sank for various reasons, add specifics to the point about the growing range of trade and consumer involvement. The Belitung shipwreck, involving an Indian or more probably Arab ship, was found in Indonesian waters in 1998. It had been built according

to Arab design, with Middle Eastern wood, though it had been repaired with materials from other areas. Its cargo consisted of some lead, a variety of Chinese ceramics from the Tang dynasty—mostly bowls, but also small jars, a few large basins, and some very artistic porcelains. Chinese coins were also carried. Star anise, another Chinese product, took some space, though there were no other spices. From the Middle East, possibly intended as gifts, were silver items, mirrors, and other glasswares, along with dice and some cast iron utensils. The ship is clear evidence of the direct trade between the Middle East and China by the 9th century; the ship had undoubtedly loaded in China and was bound for the Persian Gulf.

The Cirebon shipwreck, another recent discovery, involved a Southeast Asian boat, also sunk off the coast of Indonesia. Here too, the ship had taken on goods at Guangzhou or another southern Chinese port and was headed for the western Indian Ocean with intermediate stops at Southeast Asian ports. The ship contained over 200,000 artifacts, including objects for Buddhist and Hindu temples. Chinese ceramics were again strongly represented, with bowls, platters, pitchers but also figurines and incense burners. Colored glassware included many items inscribed in Arabic. Various jewels and ornate daggers, mirrors, and bells suggest ritual objects. Items belonging to crew members suggest a multi-faith, multi-ethnic crew of Hindus, Buddhists, and Muslims.

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Several crucial developments converged in the centuries before 1000. Islam rose and spread rapidly; in the Middle East and North Africa a new Arab caliphate provided additional political structure. The spread of Christianity and Buddhism continued as well, particularly in some new geographic centers, like Japan and northern Europe, connected as well to more established civilizations. The Chinese Empire revived, and began to exercise wider regional influence.

The creation of a new network for interactions among different regions depended on the confluence of many of these specific changes, along with the growth of trade itself. Arab and other Islamic merchants and missionaries gained a new leadership role, extending an east-west axis from China and its neighbors to Europe and North Africa. Additionally, the emergence of a number of additional exchange routes depended on improved social organization in places like Japan, West Africa, and Russia; many of these new routes ran south to north, and greatly expanded the geography of participation in active contacts. Capping all this, the crafting of new technologies, particularly for sea travel, both reflected and further supported the extension of trade.

### Arabs as Transregional Leaders

By the 7th and 8th centuries, Arabs played an increasingly dominant role in Indian Ocean trade, using many routes and exchanging many products that had

been in play before, but with increased intensity and range. They neither sought nor gained monopoly: Indians were still active, as were other peoples from the Middle East including Persians; traders from Southeast Asia maintained participation as well. But the Arab role was noteworthy, and this helped extend Indian Ocean activity particularly down the east coast of Africa, all the way to present-day Mozambique. Arab trading settlements were established at ports and on islands down the coast, and merchants mixed with local elites to form a network of connections. A new language, Swahili (from the Arab word for "shores"), mixing Arabic and African (Bantu) tongues with some Persian words as well, emerged for this trading and governing community, a clear sign of the cultural accompaniments to more consistent commercial exchange. And Islam, the religion of a growing majority of Arabs, provided religious linkage as well.

In addition to the enhanced African connection, Arabs and other Islamic traders brought several new components even to established Indian Ocean routes. Arab conquests through the Middle East and North Africa, and into Spain and Central Asia, provided a large, landed territorial base that helped link Mediterranean and Indian Ocean trade and provided a number of vantage points for ventures into the Indian Ocean itself. At various junctures between 600 and 1100, Red Sea expeditions, from the Arabian Peninsula or Egypt, provided a primary entry for Arab activities not only to Africa but to India, Southeast Asia, and beyond. At other times, the equally traditional basis of ports in Mesopotamia and the Persian Gulf served as the chief focus for trading expeditions.

The high Arab and Islamic valuation of commerce and merchant endeavor provided a vital component, along with the spur of competition with Persian and other traders. Muhammed himself was a former merchant and noted the value and satisfaction of merchant life, second only to a religious vocation. While later Islamic authorities sometimes questioned commercial motives, concerned about the honesty of activities designed to make money, Islam overall was far friendlier to the merchant calling than any of the other world religions, or than Confucianism in China. The *Quran* explicitly equates honest merchants with prophets and martyrs. Trading and profit-taking were perfectly compatible with religious purity so long as certain ethical standards were observed, including refraining from directly charging interest on loans, and so long as religious obligations such as regular prayer and charity were fulfilled. Indeed, merchant wealth so obviously contributed to the capacity for charitable activity, and also the ability to undertake the pilgrimage to Mecca, that it might be seen as a religious plus. And of course, in fact, expansion of trade directly encouraged Islamic missionary activity. The contrast with Buddhist concerns about the snares of worldly achievements, or Christian worry that too much interest in money-making might distract from spiritual goals, was considerable. Of course Buddhists and Christians could be successful merchants as

well, and by the 14th century Christian attacks on business were lessening, but the Islamic cultural impulse, the sense that trading success and religious devotion could go hand in hand, helped push Arab merchants to unusual heights.

Islam, and Arabic, provided other trading assets as well. A reinforcing pattern emerged in which expanding trade helped encourage conversion to Islam, not only along the African coast but in parts of India and Southeast Asia, which in turn made it easier for Arabs to deal with local merchants as co-religionists. Ultimately, this shared religious factor would encourage Indian Muslims, Indonesians, and others to become more active in interregional trade in their own right, but initially, obviously, the impulse came from the Middle East.

The same cultural umbrella made Arabic something of a common language throughout much of the Indian Ocean, which in turn helps explain how an increasing rate of contact could operate given the many languages which flourished in the regions involved. Enough people knew smatterings of Arabic, and enough translators emerged who could use Arabic to interact with other language groups, to facilitate regular exchanges well beyond the level that had operated previously. Not surprisingly, at the end of the 15th century when the Portuguese explorer Vasco de Gama rounded the southern tip of Africa and set sail for India, one of his key moves was to find a Muslim interpreter who knew sufficient Portuguese to backstop interactions with Indian merchants.

Travel and trade in turn served as important elements of Arab culture as it evolved in the centuries about 1000 CE. A number of books discussed trade routes and served as travel guides, and there were also Persian materials that discussed travel for example in China. The famous stories of *A Thousand and One Nights*, written during the Abbasid caliphate, used the character of Sinbad the Sailor to take readers through the Indian Ocean, encountering bizarre birds (ostriches) in Africa along with purchases of ivory elephant tusks, visiting ruby markets in Sri Lanka, meeting menacing tribesmen in Indonesia. Later stories, like the *Tales of Abu Zayd*, similarly used Indian Ocean trade routes as the setting for various adventures. Offerings of this sort reflected the importance of Arab involvement in wide exchanges, and might stimulate interest in these exchanges in turn.

Scholars like Amira Bennison have indeed argued that the expansion of Islam, and the intense belief in a basic Muslim unity across geographical and political borders, created a first example of a global community. The Muslim *umma*, or community, knew no clear boundaries, but embraced all believers. Common commitment to Islamic law, the *Sharia*, along with the shared faith created genuine ties across long distances. So did the *haji*, or pilgrimage to Mecca, which additionally allowed believers from many different regions to share news and experience and enhance a sense of shared commitment regardless of place. To a slightly lesser extent, common beliefs about the state, and the relations between religion and politics, spread widely, though

particularly within the confines of the Arab caliphate. All of this was not mere theory. Muslim scholars, for example, could travel widely and participate actively in discussions of faith and law among groups of colleagues in any Islamic center (though there were divisions among different schools of thought, even aside from the major rift between Sunni and Shi'ite). Many traveling scholars earned money by giving lectures or working in local bureaucracies, again across a wide geographical reach. Of course the Islamic world, the *dar al-Islam* or land of Islam, was not in fact the entire world, even in Afro-Eurasia. Muslims also identified a *dar al-harb*, or land of war, outside the Islamic purview—which in the centuries around 1000 CE particularly referred to Europe and East Asia. But the sense of shared endeavor created vital links for Muslims themselves and a larger context for wider exchange.

All of this contributed to the crucial point, as far as the rest of Afro-Eurasia and not just the Islamic regions were concerned: that as Arabs gained a growing role in transregional trade, particularly in the Indian Ocean, they also helped expand its range, volume, and impact. Islam itself came to recognize an intermediate zone, a *dar al-sulh* or land of truce, which linked Islamic trade to neighboring territories that were outside the Muslim community but with which active relationships were both possible and desirable.

Islamic energy pushed in a number of directions. Expeditions in the Red Sea, both commercial and military, began in the 7th century. By the early 8th century Arabs had directly captured territory in what is today southern Pakistan, and planted commercial colonies in Indian port cities all along the Persian Gulf and also in Sri Lanka. Along with the growing activity in East Africa, this led to varied and vibrant exchanges of goods among Africa, the Middle East, and the Indian subcontinent, going well beyond the luxury level that had largely characterized interregional activity previously. Africa contributed ivory, gold, and iron as well as slaves. Middle Eastern products included rugs, tools, jewelry, and cooking ware (iron and copper pots), while India offered cloth (particularly its famed and colorful cottons), metal implements, and decorative beads, plus the highly valued spices.

Exchanges pushed farther east, to Thailand and Burma but also to south China. By the late 7th century Arabs and Persians, as well as Indians and Malaysians, were listed by Chinese officials as ship owners working out of the port of Guangzhou. Arabs began importing Chinese porcelains, cloth, carpets, and glassware to East Africa. Porcelain, indeed, increasingly became the most important single Chinese export, surpassing silk (which now began to be produced in some other areas, such as the Byzantine Empire) despite the fact that it was both fragile and relatively heavy to ship. By the late 8th century a significant colony of Arab merchants actually located in Guangzhou, where the Chinese allowed them to follow their own laws and establish their own system of judges. Disruptions occurred, to be sure; for example the

Chinese periodically tried to close Guangzhou to foreigners, but the importance of trade, and the merchants capable of maintaining it, survived the interruptions.

Arab commercial forays (along with ongoing and often competitive Persian activity) brought involvement from other groups. Indian merchants began to settle in some of the Swahili ports of East Africa, to oversee trade between that region and the subcontinent. Jewish merchants moved easily from the Mediterranean to China. As noted, Muslims in other parts of Asia began to ~~gain~~ their own growing role in Indian Ocean commerce.

Arab connections furthered additional innovations. Partnerships developed between Arabs and local merchant houses, which helped organize more detailed commercial interactions. Bills of exchange were introduced, which facilitated payments for goods of distant origin, instead of requiring more direct barter on the spot in a port city. Arab commercial law was recognized in a number of different regions, and the Arabs helped create a precedent in which commercial regulations might be seen as transcending individual political units—with the individual states agreeing because of the profits the larger trading system brought to local merchants and their contributions to tax revenues.

This east-west network was reaching proportions that affected the daily lives of many producers and consumers alike. Significant numbers of people now valued goods that came from a different region, and while the emphasis still lay on personal and household adornment the range of goods, and the capacity to spread to consumers not in the tops ranks of wealth, extended beyond prior levels. Key regions, particularly in parts of China, in turn came to depend on the production of manufactured items that would be sold in the transregional trade—to India, to the Middle East, to Africa and even beyond. China's role as a production center for other parts of the world, such an obvious part of globalization today, was first established during the Tang and particularly the Song dynasties in the centuries around 1000 CE.

Not surprisingly, the same intensification involved transmissions that went beyond the ranks of merchants themselves. Again, some precedent existed from earlier patterns, but the range and speed of these wider exchanges were quite new. Crops spread from one region to another on the heels of trade. Enhanced trade with India—even though it expanded on previous connections—now allowed Persians and Arabs to import sugar cane, saffron, and various rice grains, that began to be grown locally and soon became staples of the regional diet. Knowledge of silk production was smuggled out of China—to the Byzantine Empire, for example, by some Syrian monks in the 6th century. Persia was also producing silk by this point. Chinese silks were still highly valued, but they now had to compete with regional production. New Chinese manufacturing methods for porcelain—introduced to allow a nonporous container for tea, which was becoming a popular Chinese drink at this same time—helped propel this good to its new prominence, particularly in trade

with the Middle East. Here was an early example of how increased international exchange generated competition that reduced the product edge in one category—in this case, Chinese silk—forcing greater concentration on an additional, new specialty (porcelain)—a pattern that would become commonplace as globalization accelerated. Cultural exchanges were set in motion as well, as Arabs by the 9th century were introducing the superior Indian numbering system and the concept of zero into their own mathematics. Transmissions of this sort, becoming an integral part of interregional contact, prefigured the similar, if admittedly more extensive, amplifications that have become a routine part of globalization.

## New Technology

Arab commerce helped generate significant improvements in shipping technology, utilizing ideas from China and Southeast Asia as well as the Middle East. The innovations were not earthshaking in the sense of dramatically reducing the time needed for transportation or communication, but they did support growing use of the seas, initially in the Indian Ocean and later elsewhere, and a higher volume in the exchanges of heavy goods. Movement of bulk goods, like grains and metal ores, became possible as never before. Along with the sheer expansion of east-west trade, the new shipping capacities provided another step in the network of changes that produced a measurably different kind of transregional network from any of the patterns that had been established before. What was developing was a more sophisticated technological toolkit for ocean-born trade, increasing the reliability of travel and expanding the distances over which trade could be carried out successfully. The spread of these same innovations, part of the growing intensity of transregional connection, also allowed other peoples to begin to participate in more venture-some maritime travel, including additional groups from Southeast Asia but also the Europeans.

Arabs gained new advantages as they learned navigational techniques and ship designs from Persian traders, after their conquest of that region. Indeed a variety of Persian words entered Arabic and would later, from Arab influence, penetrate Western languages as well—words like *barge*, *lateen*, *helm*, and *anchor*.

Improvements in navigational devices were critical. Arabs directly introduced a device called the *kamal*, which superseded the use of fingers held parallel to the horizon line to locate one's position in relation to a known star. The *kamal* was fairly simple, with a cord held by a wooden crossbar, but it did allow more accurate calculation. Sailors in the period also utilized a quadrant, a quarter-circle with a plumb line and markings to indicate position. Arabs also picked up and improved the astrolabe, a device initially introduced in classical Greece, translating Greek manuscripts on the subject into Arabic by the 8th century. Astrolabes allowed the calculation of heights of mountains or human structures,

as well as accurately measuring the position of objects in the sky. Astrolabes facilitated land-based as well as seagoing transportation, determining latitude and longitude though only approximately. The Arab astronomer al-Farghani developed tables for calibrating astrolabes to every degree of latitude, making the device easier to use. Written work on astrolabes spread through the Islamic world, from Spain to Central Asia. Ultimately, through Spain, other Europeans learned of the device; the famous early English author Chaucer, among others, wrote a treatise on the subject.

Even more important was the introduction and dissemination of the magnetic compass. Here was an instrument that could indicate direction in virtually any circumstance, in contrast to the astrolabe which greatly aided positioning but was of little use in a stormy sea because it needed to hang freely to find the horizon.

Though some European historians once claimed that the compass must be of European origin, apparently on grounds that no other people could introduce such a clever device, it's clear that the instrument originated in China, at some point in the Han dynasty. It may initially have been used to help guide the arrangement of furniture, according to the principles of *Feng shui*, but this is not certain. And it was the navigational use, becoming very clear by the 7th century, which was really important. By that point, the Chinese knew that an iron needle could be magnetized by rubbing it with magnetic ore, and they were also able to use intense heat to magnetize a needle in a north-south direction. The needle could then be floated in a bowl of water, where it would spin until it pointed. By the 11th century, compasses used needles suspended in water, but also held by a pin or a silk thread. A Chinese military treatise in 1044 described a compass, and during the Song dynasty compasses were being used at sea to take bearings, particularly during cloudy weather when stars were not visible.

Through trade contacts, or possibly by written descriptions that spread along land routes, the Arabs learned of the compass at least by the 13th century but probably well before. A story in 1233 told of how to use an iron, fish-shaped needle in a bowl of water to find direction. Another reference from the Red Sea, just nine years later, describes placing a magnetized needle on a reed to allow it to float. Ahmed ibn Majid was the first to mount a magnetized needle on a revolving support above a compass face, doing away with the need for water, thus making the device more portable, and providing a clearer set of directions. His work also included detailed instructions for proper use of the compass at sea. By this time also, via the Arabs, Europeans were beginning to write about the compass; an English essay, by the Augustinian monk Alexander Neckham, first mentions the compass as a way to locate the North Star in bad weather; he probably heard of it in Italy. Trading city states like Venice and Genoa, and the crusades that brought European armies to the Middle East by the 12th century, were also involved in spreading knowledge of the compass.

The first known example of a European compass comes from Italy sometime after 1253. Soon after this both Arabs and Europeans were rapidly improving the device, mounting the needle on cards showing the different directions and setting it on swivels in order to keep it level on shipboard. This technique, probably devised in Syria and initially used for suspending incense burners without spilling their contents, generated designs that were also exported to Europe. But the Mediterranean was hardly the only center of ongoing development. Indonesian and other Southeast Asian sailors were appropriating the compass from Chinese and Arab merchants in the same period, and introducing their own improvements.

Increasingly accurate charts, along with mapmaking more generally, added to the new navigational devices in facilitating oceanic travel. Pilot directions were written down, with workmanlike and highly practical precision, reflecting repeated commercial voyages but also facilitating their replication without the burden of significant uncertainty. Thus an Arab pilot, Sulaiman ibn Ahmed al-Mahri, recorded directions around the Indonesian islands and on toward China in 917 CE:

The journey from Sundib and Farandib to Shati Jan is made in the direction ESE, from Shati Jan to the island of Zanjiliya is due south and from Zanjiliya to Najirashi, SSE. . . . From Pulua Sanblan to the islands of Pulua Junar is due south and from Pulua Junar to the mountain of Malacca it is SE, and from Malacca to Singpur, and this is the end of Siam to the South, and there the Little Bear is 5 degrees above the horizon. . . . the journey from Singpur to Ban-agah, where the Pole Star is 4 degrees above the horizon, is N by W. . . . Then from Sharh-i-Naw to Cape Kanbusa, at 5 degrees P.S., is SE by E. From Kanbusa to Shanba at 7 degrees P.S. is NNE, and from Shanba to the Gulf of Kawashi at 10 degrees P.S. is NNW.

Charts of this sort, widely distributed among merchants from various bases in the Indian Ocean, both reflected and promoted increasingly extensive trade.

Shipping itself was the other main beneficiary of technological improvements, though they were less dramatic than in the navigational realm. A crucial development was the growing use of the lateen sail, both in the Indian Ocean and the Mediterranean. Most early sails, in the classical period and before, had been square, which worked fine when the wind was coming straight behind a vessel, but had severe limitations otherwise—often necessitating the use of oarsmen to propel the boat in other conditions. Lateen sails were triangular, which allowed them to be maneuvered to catch winds coming from various directions; and they could be placed at the front and rear of a vessel. Both speed and flexibility benefited greatly from this innovation. Historians dispute when



and where the lateen originated, with some claiming that the later Romans and Byzantines introduced them, others pointing to Arab use well before Islam. What is clear, and of prime importance, was that the Arabs perfected the sail and extended its use, providing models from which seamen in other societies would learn.

Arab ships, called *dhow*s, came to dominate Indian Ocean trade by 1000 CE. They were relatively large boats, with transverse watertight bulkheads reducing—though as we have seen, not eliminating—the danger of sinking. Holes and gaps were closed with tree gum and coconut fiber. Wicker rails prevented waves from breaking over the ship's bulwark. Dhows had two masts, each with a lateen sail. They could move quite rapidly when the sails were spread wide, but they could also maneuver readily when the sails were raised in a high triangle, sailing in zigzag tacks into the wind. When guided by the use of the compass and the other navigational devices, and benefiting from the rudder-based steering that the Chinese had introduced, Arab ships seemed ideally suited to take advantage of wind patterns in the Indian Ocean, including down the African coast, but they could also be adapted to other settings. Many features of their design would spread to Europe as Arab and European trading contacts accelerated by the 11th and 12th centuries, and indeed the Portuguese vessels (*caravelles*) that began to introduce a new chapter in Europe's relations with the wider world, by the 15th century, were explicit adaptations of the dhow. In Arab hands, the dhows allowed faster and long trips and the transport of bulk cargoes such as foodstuffs, metals, and manufactured goods—like the Chinese porcelain that was becoming so widely sought after. Arab dhows could range up to 400 tons, with crews of 30 that provided some oarsmen to supplement primary reliance on the wind.

The next set of shipbuilding innovations came in fact from the Chinese. Chinese junks had been introduced in the Han dynasty, but their wider deployment and growing sophistication dated to the Song dynasty and its great trading outreach. Here too, developments facilitated more complex and capacious trading ventures at the time—feeding the 11th century turning point in transregional contacts—and at the same time provided models that other seagoing peoples could copy and adapt. European sailors would have their debts to Chinese as well as Arab shipbuilders.

Advances in Chinese shipbuilding began early in the Han dynasty. Chinese ships came to be known as junks, from the Malay word *djong*, or boat; the Chinese themselves did not use this term. Junks were strong, heavy ships, some of them quite large, and capable of sailing both in the South China Sea and in the Indian Ocean. Hulls were divided into watertight compartments, so that if one began to leak, the ship would not sink. (One result of this was that relatively few remains of early junks have been found, in contrast to Arab and Persian shipping, because wrecks were so rare.) The ships could carry heavy cargoes and large crews. Designs and capacities improved steadily during the

Song dynasty, by which time some ships were built that were over 200 feet long (and some scholars argue they may have been even larger, at least by the 15th century), capable of carrying not only goods but considerable armed force and also gardens and animals for the provision of fresh food. The strength and maneuverability of the junks, including of course their use of rudders, as well as their massive size, were well ahead of the types of ship available in the same period in the Mediterranean. Here, clearly, was another set of innovations in transportation that reflected the growing importance of oceanic trade and stimulated further activity in turn.

## New Routes

The final basic innovation in transregional contacts, particularly important for Africa and Europe but also embracing Japan and Southeast Asia, involved the development of feeder routes that connected additional societies to the Afro-Eurasian trading network. Many of these routes ran north-south—the most important one linked sub-Saharan West Africa to the Mediterranean and the Middle East—thus obviously helping new regions link to the fundamental east-west axis that the Arabs and others were extending.

Trade from West Africa across the Sahara to the north, particularly from the emerging empire of Ghana, began fairly early, by 600 CE or so, on the basis of African merchant activity moving out from growing cities. Africans brought goods from forested regions, including gold but also dried fish, copper, and other items, in dugout boats in the delta of the Niger River, where they met nomadic traders for the Sahara who offered salt and other products. This pattern was soon joined and amplified by Muslim merchants, including Arabs, coming south. For a time, mixed settlements developed embracing merchant groups from both directions. Travel times of three months or more were not uncommon. African rulers vigorously encouraged the trade, because of the new products it generated but more obviously still for the tax revenues they could derive. As in the Middle East, governments set up inns where groups of travelers could lodge. From North Africa came an increasing array of manufactured products, including glass beads and pottery, but also large stocks of horses, whose breeding was difficult in the sub-Saharan regions. Most of the exchange products came from North Africa or the adjacent Middle East, but even luxury Chinese goods and Indian glassware have been discovered in the West African centers. Gold continued to serve as the basis for the African offerings, but other products entered in as well, including ivory; archaeologists have discovered a mid-9th century pit with over 50 hippopotamus tusks, destined for export to the north. Slaves were also traded, though less extensively than along the Swahili routes in East Africa.

These exchange patterns led of course to wider connections and to frequent Arab commentary on African conditions. A number of Africans, including



major rulers, converted to Islam and used North African bureaucrats to help run their vast domains. Relationships with Islam were tricky, however; there were few mass conversions yet in sub-Saharan Africa. Some regions were particularly resistant, in ways that had to be balanced against trade needs. Thus Ak-Uman, writing in the 14th century about the great empire of Mali, noted that the people in one gold-producing province were “uncouth infidels.” But “the kings of this kingdom have learned by experience that as soon as one of them conquers one of the gold towns and Islam spreads and the muezzin calls to prayer there the gold there begins to decrease and then disappears, while it increases in the neighboring heathen countries.” So they left these territories alone in return for a regular gold tribute. On the other hand, in other parts of Mali, and particularly the great town of Timbuktu, with 75,000 inhabitants, many scholars visited from different parts of the Islamic world; there were 7,500 students in all. And several African leaders, most notably Mansa Musa, traveled out of the region to Mecca, spreading the reputation for wealth in gold in the process. The opening of a major route from western Africa to the Mediterranean and beyond thus rested primarily on trade, but with considerably wider potential particularly in terms of cultural contacts.

Other new routes developed as well, though with products for the most part of somewhat lesser value. By the 9th and 10th centuries, traders were actively working connections between Scandinavia and the Byzantine Empire, with Constantinople as a key exchange point. Presumably Scandinavian traders introduced the first ventures, using overland and river routes through what is now western Russia and Ukraine, with intermediary cities like Kiev growing up in response. They carried honey, furs, ambers, and craft goods, trading for textiles, pottery and glass, and spices, along with fine metal products. But Byzantine traders and Christian missionaries were soon active as well, and many Arab merchants became directly involved. In 921, Ibn Fadlan led a party from Baghdad as an emissary from the caliph, seeking to meet the “King of the Slavs.” The king had sent a letter asking for someone who could teach them about Islam and set up a mosque. The trip covered 1,500 miles, through dense forests and along the Volga and Dneiper rivers. Fadlan’s report provided information for Arab geographers and travel writers, and encouraged further contacts (though the Russians in the end decided against adopting Islam). Fadlan was intrigued by the appearance of the Russians: “I have never seen people with a more developed bodily stature than they. They are as tall as date palms, blond and ruddy, so that they do not need to wear a tunic nor a cloak; rather the men among them wear a garment that only covers half of his body and leaves one of his hands free.” Many Russian habits, including even the ways they bargained and traded, seemed strange, but this did not prevent vigorous mutual engagement. The many Arab coins found in Scandinavia testify to the range of activity, which came to include some commerce in slaves as well.

Arab outreach also widened connections with Central Asia, though here the routes were not entirely new but rather built upon earlier Silk Road patterns. Central Asian products found increasing markets, so that the region was no longer simply a passage point for Chinese goods. Various kinds of manufacturing expanded to take advantage of the export opportunities. Writing about 985, the Islamic geographer al-Muqaddasi cited a long list of exports, including rugs, lamps, various kinds of soaps as well as furs, leather goods, and various foods. “There is nothing to equal the meats of Bukhara, and a kind of melon they have called ash-shaq, nor the bows of Khorezmia, the porcelain of Shash, and the paper of Samarkand.” Traders also moved north, connecting with tribes in Siberia and using sleds when possible. Here, long-distance linkages were unprecedented, and one tribe was cited as being so unfamiliar with the whole process that they would simply bring goods to an exchange point and then vanish, coming back the next day to collect what the traders had left in exchange.

New Japanese routes to Korea and China constituted another expansion of the overall system of connections, though the distances involved were less vast than in the case of the north-south routes in West Africa and Eastern Europe. Links to Korea came first, and for a while the Koreans served as middlemen between Japan and China, but then the Japanese organized direct seaborne routes to China as well. Trade involved products like timber and mercury from Japan, in return for manufactured goods from Korea and China (but also, through China, from places like India). Merchant groups and even artisans, particularly from Korea, moved along these routes as well, settling in Japan in some numbers. Cultural exchange followed, and as we will see Japan ultimately established fairly formal systems for finding out about Chinese ways. Buddhism spread, and although some Japanese objected the contact system itself provided persuasive motivation; as one observer put it, looking at Korea, China, and beyond, “All the states of the Western foreigners worship it [Buddhism]—how could Japan alone turn its back?” This process brought missionaries as well, particularly from China but also from India (in small numbers); and it widened the demand for goods from other parts of Asia, to serve Buddhist religious rituals.

One final set of routes opened or reopened in this period, though a bit more slowly. Western Europe continued to engage in some Mediterranean trade even after the fall of the Roman Empire. Gradually, more north-south activity developed within this part of the European continent, bringing English, German, and Dutch merchants to the Mediterranean. Italian cities began to expand based on their obvious advantages in linking goods from other parts of Europe with the wider reaches of the Mediterranean, sponsoring exchanges with Arabs and Byzantines alike. But southern French ports and merchants also played some role in connecting Western Europe generally to interactions with Asia, as mediated by merchants in Egypt or the Middle East.

Overall, the development of new linkages enhanced both the impact and the complexity of patterns of interaction by 1000 CE. New parts of Africa, Europe, and Asia were increasingly engaged, even as primary focus rested still on east-west exchanges through the Indian Ocean. The geography of contact was much richer than it had been in the classical period, which meant not only the involvement of more regions and more people, but also a wider array of products and new opportunities for cultural connections as well.

### Impacts: The Pace of Exchange

The emergence of a new transregional context under Arab stimulus, the innovations in the technologies of trade and travel, and the range of routes forming networks of contact among Africa, Asia, and Europe added up to significant change in the availability of interactions among the major societies of these three continents. The resulting network generated important shifts in the nature of exchange, accelerating the mutual influences possible when societies encounter each other—building on, but surpassing, the obvious intensification of trade. Here is where the idea of a quietly revolutionary shift to transregional coherence comes in. Exchanges happened more quickly than before on various fronts, and over a wider range of activities. This kind of change was exactly what one should expect from the more specific shifts in navigation devices or regional trade routes—otherwise the claims of a new network would have little practical meaning. The key developments, in the heightened dissemination of techniques and ideas and the establishment of deliberate patterns of imitation, arguably represent a definable—if admittedly still early—phase of what we now know as globalization.

### Techniques and Tastes

Transfers of technological knowhow and, to a lesser degree, consumer preferences clearly illustrate the possibilities created by the new network. Paper is a prime example. The product was invented in China by the first century CE—this is when we have the first examples of uses of the material for writing. Different methods for making paper proliferated in China, including ways to lower manufacturing costs. By the 3rd and 4th centuries not only the product but the production technologies were being passed into Korea and Vietnam, and soon thereafter to Japan—following on China's orbit of influence in the late classical period. It was striking, of course, that paper did not capture interest more broadly, given its huge advantages over all other writing materials in cost and ease of manufacture—but despite classical trade links to China, mutual knowledge was simply not extensive enough to break the barriers of distance and unfamiliarity. India, it has been speculated, had some cultural reasons for aversion to paper, and knowledge of China was

simply not intense enough in other parts of Asia for paper to have become a priority item.

This changed dramatically with the arrival of the Arabs and a new pace of interactions with China. Arab troops defeated a Chinese army in western China, in the battle of Talas River in 751, and took several prisoners who were skilled in the manufacture of paper. A factory was established, on the basis of their knowledge, in Baghdad. The product—far cheaper and more flexible than the animal skins used for writing previously in many parts of the Middle East—caught on rapidly. By the 10th century, mills were producing paper through the Arab world and beyond, in Persia, Egypt, and Spain as well as Mesopotamia. By the 11th century, paper was spreading to non-Muslim Europe, with the first factory established in Sicily, relatively close to the Arab centers. The result, first in Islam and then beyond, was an explosion of books and records, vital to commercial transactions, administrative operations, and religious training alike. Centers of learning in West Africa also quickly benefited from the literacy and scholarship that paper could support.

There are two key points here: first, a clearly superior product that had been available but not widely known in the classical period now began to move out into other societies in the hemispheric network of Asia, Africa, and Europe at a relatively rapid pace. The dissemination process, admittedly, still took many decades, but the speed was far greater than anything that emerges from past examples of technology diffusion. Second, paper, because of its particular importance in supporting the spread of information, facilitated other kinds of exchanges, such as the translation into Arabic of knowledge and scholarship from India, Persia, China, and elsewhere—including earlier Greek scientific and philosophical texts. It became another component of the acceleration of communication among societies, in a process that would soon spread beyond the Arab world to Europe.

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Obviously, the rapid spread of navigational devices like the compass, often partly on the basis of manuals written on paper, forms an important part of the acceleration of technology exchange. So, though less familiar, does the growing interest in finding up-to-date methods of manufacturing steel. India, in the classical period, had developed the most advanced steel technology, adding ingredients to molten iron that produced a harder but more flexible metal that was preferable for certain kinds of products—including sword blades. By the late classical period, steel blocks, or eggs, were being traded along the Indian coast and across the Gulf to the Middle East. In the context of the kind of trading network that emerged by 1000 CE, merely trading for steel was unnecessarily indirect: it was better to learn how to make it oneself. Techniques of steel production in India began to be taken to the Middle East, and, with the expansion of Islam, well beyond. It was in the 12th century that the Muslim

geographer al-Idrisi wrote, "The Hindus excelled in the manufacture of iron and it is impossible to find anything to surprise the edge from Hinduwani or Indian steel." Muslim scientists like al-Biruni, Ibn Sina, and al-Kindi wrote about Indian steel in their studies of technology. Knowledge of steel production also spread east, to Indonesia, but also westward to Spain, where Toledo blades became famous through the European and Mediterranean zones. Another Arab geographer, Ibn Hawqal, wrote in 977 that "Toledo, like Damascus, was known throughout the world for its swords."

Greater speed in the dissemination of technology, but also a greater sense of intentionality, so that experts in one society began to think explicitly about what they could learn from counterparts in another, marked an important new step in the history of interregional contacts and their impact.

Developments in the area of taste were in some ways less decisively new. After all, merchants in the classical period had already discovered that certain regionally-specific items, once entered into interregional trade, could spark keen consumer attachments. Pepper from India was an established example, for people around the Mediterranean basin. It was important, nevertheless, that the roster of consumer preferences that depended on long-distance exchange expanded noticeably during the centuries around 1000 CE.

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Tea was a case in point. Tea use seems first to have developed in China late in the classical period, indeed after the fall of the great Han dynasty. The first dictionary reference comes from 350 CE. By the 5th century nomadic Turkic traders had carried tea into Central Asia, and by the 6th century its use had spread to Japan. By the 9th century tea was one of the commodities regularly carried by overland traders from China to India. The migration of Turkic peoples into the Middle East helped spread trade in tea, with consumer tastes developing in Persia and among the Arabs, ultimately penetrating the Mediterranean as well. Tea reached Europe proper only a bit later, in the 16th century, introduced by Italian merchants as a health drink. Here was a clear case of the development of an interregional consumer interest, often paired with a certain sense of ritual and by the use of cups and vessels, often made from porcelain, which also depended on transregional trade and aesthetic standards.

Sugar gained ground independently, and proved to be even more important. Sugar cane was probably originally native to parts of Indonesia, but cultivation gradually spread to other parts of Southeast Asia and to India. It was in India, by the 4th century BCE, that processes were invented to extract crystals from the cane, so that sugar itself, rather than cane-chewing, began to gain attention. Persians, fighting in India, learned about sugar, which one emperor termed "the reed which gives honey without bees." Early sugar cultivators, however, tried to guard the secrets of their production methods, because so much money

could be made in exports. As we have seen, sugar was one of the products involved in classical trade in the Indian Ocean.

The Arabs began to expand the impact of sugar, once they learned the production process from their conquests of Persia. Massive sugar-growing estates were combined with large refineries. Most of the production was for domestic consumption, but obviously Arab expansion spread awareness of the commodity to more distant areas, like North Africa, Spain, and Sicily. Other Europeans began to encounter sugar by the 11th century. The first mention of sugar in England comes from 1099, but the product's popularity soared still further in the next century, as a result of European crusaders' exposure in the Holy Land. Eagerness for the product expanded rapidly, creating a demand that could only with difficulty be matched by exports from the regions capable of growing cane. An English king had difficulty finding any sugar for a banquet he was organizing in the 13th century. By 1319 sugar in England was selling at a rate equivalent (in contemporary terms) to \$50 a pound. The beginnings of a globalization in the taste for sugar, obviously accelerating after 1000 CE, would have further consequences for transregional contacts later on, but the importance of this new phase of trade and mutual influence, even in matters of personal taste, preconditioned all the later developments.

Basic products like tea or sugar were not alone in inciting changes in taste. Transregional transmission of fashion moved forward in this period as well. The attractiveness of silk was, of course, already established, so there was a basis already set. But in this period certain African furs and feathers won attention as fashion symbols as far east as Mongolia—again, a tribute to the expanding range of exports. Tall hats introduced for women in China would gradually make their way to France, where they became stylish accessories for aristocratic women by the later Middle Ages—even though the women involved probably had no notion of the product's point of origin. Indian cotton textiles, as already suggested, probably were the clearest success story in terms of influencing broad consumer tastes. Indian artisans in several regions learned to respond to regional preferences, in terms of distinctive patterns and colors, while establishing a common fascination with the vividness and flexibility of cotton cloth for consumers from East Africa to the Middle East and Persia, from Central Asia to Indonesia and Japan. To be sure, some societies reacted against these foreign influences, as signaling excessive interest in luxury: various European centers tried to enact laws banning Chinese silks, and they would later turn against cotton as well on occasion. But these laws, not usually entirely effective, were themselves proof positive of the challenge of foreign influence.

## Concepts and Cultural Imitations

A second area of increasing transregional influence involved certain kinds of cultural apparatus, and some larger cultural patterns, as regions learned from

each other and certain areas, that had only recently ventured into more formal political structures, tried to accelerate their advance by deliberately studying and copying other societies.

The spread of the Indian numbering system, with associated features like the concept of zero and decimal notations, formed a particularly clear example of the new traveling power of improvements in intellectual toolkits. The superior numbering system, devised by Hindu scholars beginning as early as 300 BCE and already copied, within India, by Buddhists, reached Persia well before the middle of the 9th century. The Persian mathematician Al-Khwarizmi, writing in Arabic, described calculations with “Hindu numerals” in 825, and an Arab mathematician also highlighted the concepts just five years later. Older numbering systems survived in the Middle East until recent times, even in commerce, though Arab use of the numbers for bookkeeping would encourage their adoption by merchants in other areas such as Italy. And by the 10th century, a distinctive West Arabic version of the symbols began to spread in North Africa and Spain. The first mention of the numerals in Western Europe occurred in 976, and by the 980s Gerbert of Aurillac (later Pope Sylvester II), who had studied in northern Spain, began to spread knowledge of the numerals more widely. An Italian mathematician trained in North Africa, Leonardo Fibonacci, provided further impetus around 1200, as his training in accounting introduced him to the numbers which “very soon pleased me above all else,” though absolutely routine use in Europe would await the middle of the 16th century. Finally, it was through later European influence that the system spread still further, ultimately to East Asia and other parts of Africa as well as the Americas. Not a quick or uniform global journey, to be sure, but an indication of the power of transmission that had newly developed, from the Arabian center, by the 11th century.

Other cultural influences, aside from the world religions themselves, had a somewhat more circumscribed range, typically involving neighboring regions rather than wider impact. Here too, however, there was measurable innovation, as several societies where complex political and social patterns were newly taking hold intentionally sent student missions to more powerful states, hoping to learn a variety of secrets for success. The process began before 1000, but it ultimately fed into the larger sense of interregional connection.

Thus Japan launched a period of intense study of Chinese values and institutions in the 4th and 5th centuries, under the leadership of the powerful Yamato clan. Chinese writing was introduced, with Chinese scribes brought over to make copies of major Chinese books and to help interpret them. Later, Japanese students and scholars who were fluent in Chinese began to be sent directly to China, to further the learning process. The resulting imports were considerable: Chinese script was adapted to the very different Japanese language, giving the Japanese a written culture for the first time. Both Buddhist and Confucian ideas were widely imported, with Buddhist missionaries initially

taking the lead. Other Chinese cultural forms, from styles of poetry to martial arts and gardening, were brought over and integrated into Japanese life. Both architecture and painting reflected the growing Chinese influence. Japanese literature filled with references to Chinese classical writings. New tools and techniques were introduced as well, from Korea as well as China, contributing to rising agricultural output but also helping to launch a serious mining sector for the first time. Chinese legal codes established a more patriarchal family structure in Japan, ultimately worsening the position of women—though the most extreme practices, like foot binding, were not adopted. Following Chinese example as well, Japanese aristocrats began to engage in polygamy. For a time, the Japanese royal court also tried to follow the elaborate ceremonialism of its Chinese counterpart. At one point the Japanese emperor even added “son of heaven” to his many other titles.

This opening to the outside was not unchallenged—just as later exposures to external influences, in Japan and elsewhere, would rouse concerns from various people eager to defend established identities. Many aristocrats, for example, fought against the attempts to set up a powerful, Chinese-style central bureaucracy. Indeed, efforts at this point to imitate outside political institutions largely failed. The Japanese leaders abandoned the practice of sending regular official visits to China in the 9th century, though trade and cultural exchange continued at a high level. Clearly, despite massive imports, Japanese and Chinese societies did not merge into a single pattern. Still, the long period of deliberate and extensive imitation transformed Japanese life in fundamental ways.

Other patterns of intentional imitation opened up a bit later. Russian commercial interactions with the Byzantine Empire, along with Byzantine missionary activity, led to substantial but essentially one-way exchange. From Byzantium Russia would copy Christianity, including the Orthodox definition of the appropriate relationship between church and state, and with this a host of artistic forms particularly in the religious realm. An adapted Greek alphabet, called Cyrillic, gave Russians access to writing for the first time. As in Japan’s experience with China, Russian interest in Byzantine political systems proved hard to implement, but some ideas, particularly about the importance of empire, did take root and affected Russian political forms later on.

Western Europe, by the 11th century, was actively staking out patterns of imitation as well. Political leaders, though sometimes aware of the sophistication of the Byzantine Empire and Arab caliphate, did little to sponsor direct study. This was not true for merchants, who were eager to copy the successful methods of their Arab brethren; a key result was the importation into Europe of the idea of commercial laws that might transcend specific political boundaries. Students of science, mathematics, and philosophy were at least as zealous, with many groups visiting scholarly centers in Islamic Spain or North Africa, as well as Byzantium. The goal of these missions rested in part on an interest in

recovering classical Greek and Hellenistic materials, often better preserved in the Arab and Byzantine domains. But interpretations of classical science and philosophy entered into the picture as well, with Arab philosophers like Ibn Rushd (known in the West as Averroes), who worked on issues such as the relationship between faith and reason, playing a huge role in setting up leading intellectual debates. Arab achievements in mathematics also drew Western students directly, as with Leonardo Fibonacci; this kind of contact even brought Arab words like algebra into Western languages, in acknowledgment of the importance of their contributions. Arab work in medicine also gained ~~wide influence~~.

The kinds of trade and religious contacts developing by 1000 CE generated cultural and political imitations from sub-Saharan Africa (looking to the larger Islamic world) and Southeast Asia as well. But it was the explicitness of the foreign study programs issuing from Japan, Western Europe, and Russia that were particularly interesting in going beyond the normal effects of extensive contact through the acknowledgment of the importance of learning from other places. This attitude, which would continue to burn bright in many of these same societies, at least recurrently, in later phases of interregional contacts, suggests the relationship between the most self-conscious programs of examining external cultures and institutions and one core aspect of what globalization still involves. Japan thus sketched its main response to contemporary globalization from 1868 onward, in part because its leaders could recall the success of the previous openness to Chinese example in generating demonstrable gains without ultimate loss of identity. To be sure, the efforts around 1000 CE involved neighbors, not the more distant models that some societies have had to chase more recently. But the patterns set at this point help explain why later, even more venturesome outreach would be conceivable.

### The Travelers and Expanded Interregional Knowledge

The emergence of more venturesome long-distance travelers was a final example of the kinds of impact the new transregional network began to have, at least within a few centuries. The known travelers were obviously a small minority, but their initiatives helped to put a human face on the new routes and technologies for communication. They reflect the new levels of interest as well as the new opportunities. The consequences of their ventures added, at least a bit in the cases where vivid travel accounts resulted, to the available information on the wider world and could spur others—like Christopher Columbus—to further efforts later on.

While the most famous travelers of the period, notably Marco Polo from Europe and Ibn Battuta from North Africa, operated a few centuries after 1000, the precedent for more venturesome travel was established earlier. It was by the 9th century, for example, that merchants and seamen from the Middle

East, embarking from ports in the Persian Gulf, began regularly to cover the 6,000 miles to the Pacific harbors of southern China, a trip that probably took at least six months. A Persian book early in the 10th century, *The Account of China and India*, began to put these experiences into written form, offering information and the sense of enticement that distant voyages could generate. Other books, mainly by Persian sailors, offered vivid titles like the *Book of the Wonders of India*, with stories about other parts of Asia as well as India and a dramatic sense of the exotic adventure and profit travel could bring.

Religion continued to spur travel as well, particularly given the pilgrimage goals of pious Muslims. As Islam expanded, trips of 400 miles or more, for example from Central Asia to Mecca, became increasingly common, often involving individuals (including women) who otherwise would not normally be counted among the most venturesome. Religion and trade combined to supply regular caravans of camels or donkeys, moving through various parts of Asia, the Middle East, and North Africa, and benefiting as well from the inns that were open at set intervals throughout the region. By the 12th century, religious travelers from West Africa, crossing the Sahara and then moving east along the Mediterranean, added to the pilgrims to Mecca.

This was the context in which the greatest traveler of the age, Ibn Battuta (b. 1304), launched his amazing series of voyages. Initially motivated by the religious pilgrimage to Mecca, to which he (like many Muslims) added side trips to other cities in the region, Ibn Battuta clearly caught an unusually fierce appetite for travel, from his early 20s into middle age, when he finally settled down back in Morocco and plied his profession as a lawyer. Deep interest in seeing new things, continued religious motivation in exploring the expanses of the dar al-Islam, a desire for professional adventure—Battuta often took up jobs in Muslim governments in places like India—all combined. At some points also, a fair dose of sexual appetite probably entered in (Battuta periodically married and then divorced women in some of his stops, like the Maldiv Islands)—all sorts of stimuli kept him going at an almost nonstop pace. The distances covered were truly unusual, but equally important was the fact that Battuta was working largely within a well-established system that illustrated how far the connections among major societies had advanced.

Pushing beyond the Middle East proper, Battuta visited Somalia on the African coast, and also (while in principle heading for India, where he hoped to get a job) went deep into Central Asia, heading up the Volga River into Mongol-dominated Russia. Doubling back to the Byzantine Empire, on a multi-year trip, he did finally end up in India, staying (unusually for him) six years, and encountering a number of adventures with bandits once he tried to leave.

His next goal was China, but again he wandered around considerably in the process, hitting the Maldives and also Sri Lanka. His ultimate stay in China was his only prolonged experience outside the Islamic orbit, and his reactions were

interesting (and not totally strange to some global travelers even in our own day, when societies have converged far more than they had at that point). He recognized China's achievements and importance, but he could not feel at ease.

China was beautiful, but it did not please me. On the contrary, I was very worried by the fact that the heathen have the upper hand there. When I left my house, I saw countless dreadful things. That disturbed me so much that I stayed home and only went out when I was forced to do so. When I saw Muslims in China, I felt as though I was seeing my own kith and kin.

This was hardly the last time that an increase in global contacts would take people out of their comfort zone.

Battuta claimed to have traveled fairly widely in China, and despite his general lack of enthusiasm he did offer some excited comments about the qualities of the great Chinese ships. On the way home he stopped in Indonesia and other parts of Southeast Asia. Then a final trip, in the mid-14th century, took him to the great empire of Mali in West Africa.

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A final series of major travelers involved the growing number of West Europeans who began to make their way to China, using land routes, Indian Ocean connections, or some combination. Merchants and missionaries headed the list—the Catholic Pope sent several missions to China in hopes of encouraging conversions. But there were also scattered entertainers and others eager for some combination of adventure and profit.

The most famous, and certainly the most influential, of these European travelers was the Venetian Marco Polo, who used a previous trip by his uncles, from Persia to China, as precedent for forging a major expedition of his own. Polo, with his uncles, crossed into western China in 1273, after two years spent covering the 8,000 miles from the Mediterranean to the Middle East and Persia; it would take another year to reach the Chinese heartland. (The long travel times involved in this sort of venture help explain among other things how language barriers might be negotiated: a traveler could pick up at least a smattering of a new language—in the case of the Polos, Mongolian—while negotiating the transit itself.) Although Polo certainly recognized that the Chinese were “idolaters,” in that they were not Christian, his admiration for Chinese political and urban achievements, and consumer prosperity, overcame any sense of strangeness—in obvious contrast to Battuta's reactions. Polo's later account, widely read in Europe by would-be adventurers over many centuries, made Chinese superiority very clear—in turn a clear motivation for Europeans to learn more from the Chinese and to find ways through trade to gain directly some of the benefits of Chinese achievements.

Both trade and travel, finally, generated an even wider literature about distant places and the excitement of foreign lands. A century after Marco Polo's account, an Englishman calling himself Sir John Mandeville wrote a book simply called *Travels*. It was largely fanciful, though many readers thought it reflected real journeys, as it described amazing people (like those who grew only one leg, in Ethiopia, which they used as an umbrella when they were sitting down) and massive treasures of gold in Africa and Asia. Work of this sort continued to stimulate wide interest—Christopher Columbus carried a copy of *Travels*, along with Polo's account—with its implications of the vast wealth and excitement that foreign ventures might bring.

The combination of expanding knowledge and excited misinformation involved more than European publics, in this age of new transregional contacts. Chinese readers now could learn at least a bit about Africa. Direct Chinese merchant contact with East Africa expanded in the early 15th century, for a few decades, but even before then the interactions Chinese had with Persian and Arab merchants who had also visited Africa, a small number of African slaves directly traded to China, and the interest in African goods and exotic animals combined produce to some sense of what Africa was like and why it might be interesting.

Travel and interregional knowledge, then, though still limited by the standards of our own time, expanded rapidly, even creating some of the issues about oversimplification and regional stereotyping that globalization still can involve today. The results unquestionably set a basis for further activity, as the cycle of transregional contacts ratcheted upward.

### Regional Patterns

More and more regions were affected by significant contacts around 1000 CE—this is why historians can talk about a genuine if “archaic” phase of globalization. But the nature of involvements varied, and this was important both at the time and as a forerunner to later differentiations.

Obviously, the Americas, Australia-New Zealand, and Pacific Oceania were the most distinctive regions, with no effective contact with the transregional network at all. This left these areas unable to take advantage of the technologies or the range of domesticated animals available in Afro-Eurasia; it also left these populations without resistance to some of the diseases that were common elsewhere. None of this directly affected these regions at this point—they prospered in many ways—but it set them up for uncomfortable encounters later on.

Several regions participated in transregional contacts in distinctive ways. African merchants traded actively across the Sahara and with the Middle East, but they depended on Arab merchants for access to goods from other regions and for shipping. Russia, heavily involved in trade with Byzantium and with



the Arabs, did not generate a far-flung merchant class, and its geography and climate limited its maritime activities. Japan reached out to Korea and China but not beyond, depending on these contacts for any access to the wider world. Several regions, in other words, though heavily involved with new transregional contacts, relied on others for the most ambitious outreach.

Western Europe displayed some of the same features. It relied primarily on Arab merchants for access to goods from other parts of Asia. This dependence caused some active discontent, however. Europeans resented the higher prices Arab merchants charged, and as Christians were somewhat uncomfortable with reliance on Islamic traders as well. Europe also suffered from what today would be called a balance of payment problem: increasingly eager for access to Asian goods like sugar or silk, Europe itself generated few products of interest on the transregional market. These issues help explain some new European initiatives within a few centuries after 1000 CE.

China was a full and successful participant in transregional trade, with the strongest manufacturing sector of the period. Chinese merchants traded directly with many parts of east and Southeast Asia. Except for a brief though intriguing moment after 1400, however, China relied heavily on other merchants, like the Arabs, to disseminate its goods more widely. And while China was affected by the world religions—particularly Buddhism, but with a new Muslim minority on its western borders—Chinese culture was less influenced by missionary religions than was true in other parts of Afro-Eurasia. India's trading position suffered a bit with the rise of Arab activity, but many Indian merchants, including groups that converted to Islam, gained a growing role later on; similarly, Southeast Asian commerce, again including participation by Muslims as Islam spread in this region, gained greater importance as well. By the same token, Arab dominance in transregional trade, so vital in the centuries leading up to 1000 CE, began to decline a bit in face of growing competition.

Each region, in other words, had something of its own style in its participation in the transregional exchanges. And regional patterns also changed in the centuries after 1000, as some groups sought to take new advantage of the network while other regions fell back a bit. This phase of globalization, like the more recent phases, encouraged shifting regional dynamics.

## 1000 CE and the Stages of Globalization

The innovations linked to the accelerating levels of transregional contacts had costs and benefits—as has been true of every stage in the globalization process including right now. On the costs side: the 14th century saw an unprecedentedly rapid spread of contagious disease. A new round of bubonic plague—what would come to be called in Europe the Black Death—originated in western China early in the century. Within a few decades it had spread, thanks to trade, not only to other parts of China but through the Indian Ocean to the Middle

East and North Africa, where it would carry away well over a quarter of the population. Another decade or so saw the same plague in Italy and thence northward in Europe, where it had the same catastrophic effects. Diseases carried from other parts of the world, with results in high mortality, were not new—the later centuries of the classical period had seen interregional contagion. But an impact this rapid and quickly catastrophic was new in world history, though it would recur at various points later on. More extensive and swifter contacts had a price.

On the plus side: in addition to new goods and excitement, transregional contacts might begin to create some sense of shared humanity, across the various political and religious divisions that obviously still marked the world. It was also in the 14th century that a Chinese observer, Wang Li, could make the claim that with new levels of exchange, “civilization had spread everywhere, and no more barriers existed. . . . Brotherhood among peoples has certainly reached a new plane.” Exaggerated, to be sure, as are some of the more optimistic claims about globalization today. But the fact that the notion could even be put forward might suggest a novel stage in human interactions.

So was all this—the networks that had developed by 1000, the consequences that would continue to build during the ensuing two–three centuries—a definable first phase of globalization? That a new stage of interactions was emerging, compared to the more fitful patterns of the classical era, seems incontestable (though some partisans of previous trade connections would put up a bit of a fight on this). Whether this amounts to a preliminary phase of globalization or not, however, can certainly be debated. It's a question of assessing the magnitude of change and the extent of connections to what would happen subsequently. Is there a direct link between the emergence of new networks and contemporary globalization? Or are the really powerful shaping factors of more recent vintage?

Many of the negatives are obvious. The transregional connections that were surging by 1000 CE were Afro-Eurasian, not global at all. The isolation of the Americas and Pacific Oceania was the huge exception to any claim of early globalization, but there were also parts of sub-Saharan Africa that were uninvolved. The full geography of globalization had yet to be established.

Even in the Afro-Eurasian network, the times involved in effective contact were massive by contemporary standards—months, literally, instead of days to get from one end to another. This in turn limited the impact and intensity of interaction. We have seen how long it took even for obviously effective new products, like paper, to spread from one society to the next. Speed was increasing, but there were no dramatic breakthroughs yet.

The technology of contact, most obviously, had yet to be revolutionized. Attention to what the changes around 1000 CE brought toward greater globalization calls some salutary attention to aspects of the process that are not simply technological—that involve policy, commercial organization, and



motivation and not just machines. Still the lack of decisive new machines, despite more modest gains in navigation and shipbuilding, is striking.

The range of interaction was also limited, partly because of the time-of-travel factors, partly because of cultural or other traditional barriers. There was very little interregional political influence. As we have seen, efforts to copy neighbors in the area of political institutions did not prove viable, and nothing like international political standards emerged at all (save to the extent that, within major religious zones like that of Islam, larger religious criteria transcended the purely local). While the consequences of contacts were expanding—as in the explicit exchange of manufacturing techniques—the interregional process overall revolved more exclusively around trade than was the case with later phases of globalization.

Regional involvement in the network of exchange, not surprisingly, phased in and out. As we will see, oscillations between engagement and disengagement have persisted in reactions to globalization even in recent decades, but the pattern was vivid in the aftermath of the new connections that developed around 1000. Japanese retreat from the most ardent imitation of China after a few centuries has already been noted. Enthusiasm cooled still further in the 13th century, when China (but not Japan) was invaded by the Mongols, which made Japanese leaders feel that had surpassed their now-vulnerable mentor. Interest not just in imitation but even in active trade outreach declined. For quite different reasons, as the Byzantine Empire decayed by the 14th century, Russian connections with the wider world also diminished. Oscillations of this sort also qualify the idea of a compelling network, despite the important changes involved.

On the other hand, the strides toward more regular, wide-ranging, and meaningful connections were considerable. Outright globalization came closer to reality as a result of the innovations, from the specific changes in navigational capacity or trade routes to less tangible shifts like the new sense of excitement now associated with travel and with travel stories.

Particularly important were new dependencies and motivations associated with transregional exchange, along with the expanding realization of what might be learned through foreign imitation. A growing number of people really craved goods, like sugar, only available in many regions through imports. Urgent tastes of this sort could even motivate foreign policy, as when Spain and Portugal reached out to seize South Atlantic island groups like the Canaries in part, ultimately, for their potential role in expanding sugar production. (And by the 14th century they were even importing African slaves to provide labor on the new plantations, another sign of how new tastes, translated into consumer demand for imports, could drive huge changes in distant human lives.) Merchants in many societies gained a durable stake in interregional trade, another steady force for additional connections in the future.

Motivation and dependency, in turn, explain the creation of additional systems of transregional contact in the centuries after 1000 CE, particularly as Arab political vitality and leadership began to decline. Not only did new merchant groups, like Muslim Indians, pour into established trade routes. China began to accelerate its seagoing activities in the coastal Pacific and Indian oceans, with their pioneering big ships. For a brief time in the early 15th century, the Chinese even mounted major expeditions all through the Indian Ocean, reaching not only Southeast Asia but also India, the Middle East and Persian gulf regions, and East Africa, in search of trade and tribute. Finally, for over a century during the period of Mongol conquests, from the mid-13th to the late 14th, interlocking Mongol empires from China through Central Asia to the Middle East and through Eastern Europe created protected routes for land transportation, complete with imperial passports to travelers to guarantee safe conduct. (This was the context for Marco Polo's journeys, and his service in the Mongol administration of China.) Mongol tolerance of foreigners, indeed their active interest, encouraged new levels of trade and travel, especially from Europe to Asia, and of technological exchange. From the exchange in turn came two of the great technological imitations in world history, as Europeans appropriated Chinese explosive powder to create new weaponry (as early as the 14th century) and Chinese printing to set the basis for an explosion of new communication and the dissemination of ideas (from 1450 onward). Knowledge of paper money, playing cards, and a host of other items formed part of this circulation under Mongol auspices as well.

Transregional contacts, in other words, did not depend on any one system after 1000. When Arab capacity declined, other agents and additional routes replaced them, and the same pattern emerged when the Mongol empires began to crumble and attention had to return to seagoing links. Throughout these adjustments, the pace and consequence of contacts tended to continue their acceleration.

The transregional networks did more than prefigure key aspects of globalization, by creating import dependencies or habits of imitation. They also provided additional societies with the technological knowledge to enter the world arena on new terms—as Southeast Asian merchants began to do in Indian Ocean trade, or as Europeans were beginning to do on an even larger scale by the 15th century. The networks motivated new policies and new adventures to take fuller advantage of the contacts now so firmly established—as when European statesmen and explorers began to think about more direct ways to reach India and China, and in the process accidentally opened a new chapter in the whole contact process.

The next phase of globalization, from 1500 onward, thus resulted directly from the transregional network. In turn, there is a straight line, in terms of patterns, technologies, and goals, between this network and each subsequent globalization stage—including our own. Assessing the significance of

change—particularly a collection of diverse shifts like those that created the transregional network—and the force of its connections to later developments is always challenging. There's always the danger of downplaying the importance of later innovations, or assuming too much inevitability. Simply pinning a common label, like globalization, on discrete series of changes risks being misleading. But failing to recognize connections—as globalization historians have tended to do in neglecting this transregional phase, or in ignoring Arab contributions in favor of honoring Western Europe—is also misleading. Globalization was not necessarily predetermined by 1000 or 1200; it could have been diverted, and it certainly had not yet fully unfolded. But key directional signals were clearly established. The next step, after 1500, was a surprise in the sense of the unexpected, almost accidental involvement of the Americas. But it was no surprise at all that a host of people wanted to take fuller advantage of Asian and African trade and sought to gain a greater role in interregional relationships—which was precisely how transregional activity began to morph into connections much closer to globalization outright.

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### 1500 AS TURNING POINT

#### The Birth of Globalization?

Developments around 1500, and the systems that resulted, clearly moved closer to full globalization. The inclusion of the Americas in patterns of contact and, soon, the first definitely recorded trip across the Pacific, created the possibility of growing links to virtually every major society in the world. Pockets of isolation remained. Australia and New Zealand were not fully brought into the picture until the 18th century, and well after that small clusters of hunting and gathering tribes in remote spots were untouched by even tentative contact. But complete isolation was now the exception, and most regions became ever more substantially involved with exchanges of goods, people, diseases, and more.

The new global geography was only part of the change, however. The intensity and consequences of connections shifted. Precisely because exchanges had more intrusive implications, some societies consciously decided to limit their involvement—a backhanded testimony to the fact that contacts now raised new kinds of identity issues, compared to the more casual patterns of the previous phase. New types of inequality arose within the global system as well, which would become durable staples, at least to some extent, from the 1500s to the present day. In several respects, then, the meaning of global connections began to take on new contours. As happened after 1000, momentum would continue after 1500, leading to further changes, particularly by the 18th century, that further enhanced global activities.

Many global historians acknowledge the importance of the changes that began to take hold at this point. One leading practitioner of the new global history, Wolf Schafer, who argues that massive shifts after 1500 have created a fundamentally different world based on globalization, admits that 1500 nevertheless opened a significant new chapter, which he calls "protoglobalization."