

ere is the problem: In 1900, 879 million people (56% of the world's population of 1.6 billion) had never heard of Christ, Christianity or the Gospel. They were unevangelized. They could not get access to the Gospel very easily. They had no churches, no preachers, no evangelists, no Scriptures, no books and so on. What they did have: 15,000 cross-cultural missionaries (of all traditions) working among them.

One hundred years later, in 2000, the number of unevangelized people had grown to 1.6 billion—26% of the world's 6 billion. Just 10,000 missionaries were working among them.

The percentage of the world that is unreached declined (56% to 26%). But, because the world's population has grown incredibly, the total number of people who are unevangelized doubled (879 million to 1.6 billion). Meanwhile, the number of missionaries working to reach them declined (from 15,000 to 10,000—see the July 2006 issue of *Momentum* for a full discussion.)

If the task to evangelize the world could not be completed in 1900 by 15,000 workers, surely 10,000 workers are unlikely to finish it either. Clearly we need more. But how many more?

History is scattered with dedicated servants of God who were used to evangelize hundreds of thousands of people. I offer the following examples of single men or small teams (and am not making a judgment, either for or against, their theology). These individuals did not depend on technology like radio and television, which can reach audiences of hundreds of millions of people. They include:

Israel, AD 33. Jesus himself evangelized the whole of Palestine in three years, thus impacting about 800,000 people.

Antioch, AD 39. Evangelized largely through believers that fled persecution in Jerusalem, then later by Paul and Barnabas.

Antioch had a population of about 130,000, and became the sending base for mission to the Gentiles.

Iran, AD 49. Judas (Lebbaeus) and Simon the Zealot had about 100,000 converts; far more must have been evangelized despite immense hostility from Iran's priestly caste.

Asia, *AD 55*. The Roman province of Asia has been completely evangelized: 500 cities reached in 2 years by Paul and related missionary teams.

Ireland, AD 435. Patrick planted over 200 churches and baptized over 100,000 converts. He created very effective mission structures to extend this work.

Europe, AD 1399. Catalan Dominican preacher Vincent Ferrer wandered through Europe, evangelizing and bringing revival; saw 25,000 converts, preached 6,000 sermons.

Russia, AD 1712. Filofei Leszczynski, an Orthodox missionary, baptized over 40,000 and planted over 300 new churches.

USA, AD 1735. George Whitfield preached in public 18,000 times to 18 million hearers in crowds of up to 30,000, and was heard by up to 80% of the entire population of the United States.

Britain, AD 1739. John Wesley traveled up to 8,000 miles per year on average, preached 40,000 sermons, made 140,000 converts, created a vast network of churches and societies.

Alaska, AD 1792. A Russian Orthodox mission team on Kodiak island baptized 2,500 shamanist Eskimos in 2 years, and 10,000 in 1795.

USA, AD 1800s, the age of mass evangelism. Charles Finney's preaching led to the conversion of over 500,000 people. D. L.

by Justin Long, senior editor for Momentum.

Moody preached to over 100 million (before television) and personally brought 750,000 people to Christ. Billy Sunday became a nationally known evangelist who had over 200,000 converts.

AD 1900s. Billy Graham preached to 50 million in 229 crusades by 1976, with 1.5 million decisions; to 104 million by 1984 (apart from television audiences). By 2005 through media, he has preached to 2 billion people.

AD 1910, Liberia. William Wade Harris, a Liberian activist, preached across Ivory Coast and baptized 100,000 converts.

AD 1920, Africa. Simon Kimbangu, sometimes called "The People's Prophet," had a brief but powerful ministry that inspired faith in Central Africa. Imprisoned for stirring up the Congolese people, Kimbangu became the catalyst for Africa's largest independent church.

These examples seem to say a called, gifted, trained and equipped evangelistic team (composed of multiple individuals) can impact hundreds of thousands of people—if not millions—over the space of a few years.

ut are these the rule, or the exceptions? If they are the rule, then why are there not more such people? Why don't modern mission teams achieve this kind of success? We don't have that kind of success, you know.

Operation World estimates 200,000 total Protestant, Independent, and Anglican missionaries worldwide. World Christian Trends says Protestant, Independent and Anglican traditions added 4.3 million new converts per year over the period 1990-2000 (not including children born into Christian households). So 200,000 workers were each responsible for about 21 converts. (Actually, far less—for this calculation ignores the work of pastors, lay evangelists and so on.)

World Christian Trends estimates there are 420,000 missionaries worldwide (including Orthodox, Marginals and Roman Catholics). About 32 million unevangelized people hear the Gospel for the first time each year. Each missionary is responsible, on average, for about 76 newly evangelized people.

Of course, these are simply averages: the middle position between two extremes. Some missionaries see many converts, and others less. Consider the *JESUS Film*. Over 5.4 billion people have seen it since 1979, of whom 200 million have made a decision for Christ. There are 4,600 *JESUS Film* teams, so this equates to about 1.1 million evangelized and 43,000 converts per team. This is, of course, *very rough*. The *JESUS Film* hasn't always had 4,600 teams, and today's teams aren't the same as the teams 30 years ago. Even if we divided by 30 for an annual figure, however, it equates to 36,000 evangelized and 1,400 converts per year. This is significantly higher than the average cited above, but still far below the "heroic" levels in the first few examples.

There are more startling cases. The mostly Muslim Bhojpuri of northeast India are one. The state of Bihar, home to 39 million Bhojpuri, is the birthplace of Hinduism, Buddhism, Jainism

and the hyper-nationalistic movements of India. In the 100 year history of missionary work among the Bhojpuri, there has been very little fruit. Bihar has been commonly known as the "grave-yard of missions and missionaries." Yet, in the past 15 years, a church planting movement has resulted in 30,000 churches led and planted by indigenous peoples. Over 1 million believers

There are significant differences between evangelists and crosscultural missionaries.

have been baptized. Some of these churches are 10th generation church plants—considered very rapid indeed. A dozen Muslim *imams* are now baptized church planters and prayer groups are meeting in mosques.

Still, the reality is that this movement—extraodinary though it is—is only a samll part of India's 1.2 billion people. These 1 million believers represent less than 1% of India. There are several similar stories that can be told. In spite of the success of the numbers, a significant task remains: more than 150,000 Bhojpuri villages unreached, work on the Old Testament translation unfinished, and—beyond the Bhojpuri—yet another 120 million Muslims throughout the rest of India.

art of the answer is that there are significant differences between the cross-cultural missionary team and the mass evangelist. This is natural. Let's look at some of these differences.

Evangelists work in their own language. They have no need for translation. Paul, for example, was equally at home in Greek and Hebrew, and Greek was widely used through the Roman empire.

Evangelists are already contextualized. They do not need to spend months or years learning the culture. Instead, they spend time presenting the Gospel. Many preach tens of thousands of sermons. They did not need to strive at contextualization, since they already were part of the culture they were seeking to reach. (Yes, Paul did contextualize somewhat during the whole Jews-vs-Gentiles controversy—but that's not quite the same as contextualizing for a society with which you are not familiar at all.)

Evangelists have fewer security issues. Although some have faced severe hostility, most don't have the same kind of security worries that cross-cultural workers do. Most evangelists are local and "fit in." Some as citizens have personal freedoms: Paul was protected to some degree by his Roman citizenship, as were the evangelists of the Great Awakening. D. L. Moody, for example, never worried about being hauled off to face a firing squad.

Evangelists find it easier to raise funds. Those who are working

in their own context, generally find it easier to get the funding than those who are working cross-culturally. Donors can immediately 'see' the benefits. Thus, it will typically be easier for Billy Graham to raise funds for a city-wide crusade in America than it will be for a missionary to raise funds from Americans for ministry in Algeria.

Now, let's consider the life of Robert Morrison, the first Protestant missionary in China (sent by the London Missionary Society in 1807). He arrived in Macao and ministered in China for nearly 30 years. He translated the Bible into Mandarin by 1818 and a dictionary by 1821. He faced numerous pressures. Imperial edicts against foreigners forced him to hide in his house. He died in 1834—having seen only 10 converts.

What about Amy Carmichael? She didn't see hundreds of thousands of converts, either. She was rejected by the China Inland Mission in 1892—for "frailty." She went as a Keswick missionary to Japan, but decided that was not where God wanted her and eventually ended up in India in 1895. By 1899 she had developed a ministry rescuing children who had been dedicated by their families to serve as temple prostitutes; she eventually

founded a society called the "Sisters of the Common Life." She served for 56 years without furlough, took in more than 1,000 children in her orphanages, and wrote over 35 books.

Then there's Gladys Aylward, who likewise was rejected by mission agencies for service in China. She decided to go anyway, on her own. She saved up her own money and traveled by train from Liverpool, London across Europe and Russia, through battle zones (China and Japan were at war at the time), ultimately reaching Yangchen. She took up work helping a retired missionary lady at an inn for muleteers, learned Mandarin (in spite of the fact mission agencies had been sure she was too uneducated to do that), evangelized surrounding villages, and took in orphan children. She became a Chinese citizen in 1936 and, when warfare in the region became too intense, led her 100 orphan children over a hundred miles to a safer province.

Adoniram Judson, the first American missionary to Burma (modern Myanmar), served for 37 years with only one home leave. During his ministry he translated the Bible, planted 100 churches, and saw 8,000 converts. The believers continued to grow and multiply after his death, and Burma eventually attained

Name	Population	Unevangelized	Evangelized non-Christian	Teams
World	5,901,844,134	1,849,722,854	2,468,121,056	43,178
AFRICA	2,032,559,964	222,816,389	254,174,136	4,770
Eastern Africa	1,365,535,133	43,080,556	65,760,569	1,088
Middle Africa	99,797,663	9,461,624	10,237,230	197
Northern Africa	47,894,675	88,935,669	84,380,581	1,733
Southern Africa	152,799,943	1,193,130	8,134,617	93
Western Africa	366,532,550	80,145,410	85,661,139	1,658
ASIA	739,419,873	1,590,549,735	1,976,330,729	35,669
Eastern Asia	93,429,016	543,932,954	850,376,910	13,943
South-central Asia	391,605,621	751,457,089	783,448,570	15,349
South-eastern Asia	81,207,954	187,108,214	249,812,980	4,369
Western Asia	173,177,282	108,051,478	92,692,269	2,007
EUROPE	1,676,854,197	25,162,182	146,060,373	1,712
Eastern Europe	43,698,884	12,094,810	68,590,481	807
Northern Europe	1,250,797,792	2,075,620	15,095,314	172
Southern Europe	209,097,762	4,497,993	20,522,772	250
Western Europe	173,259,759	6,493,759	41,851,806	483
LATIN AMERICA	946,042,297	4,538,383	36,634,438	412
Caribbean	337,677,487	387,522	6,863,714	73
Central America	35.884.840	941,339	5,013,973	60
South America	572,479,970	3,209,522	24,756,751	280
NORTH AMERICA	21,845,613	5,901,825	49,138,679	550
PACIFIC	485,122,190	754,340	5,782,701	65
Australia-New Zealand	5,172,440	546,893	5,145,271	57
Melanesia	126,650,768	195,345	555,979	8
Micronesia	311,009,622	5,929	33,876	0
Polynesia	42,289,360	6,173	47,575	1

Source: Population figures are from the *United Nations Population Projections*, as of the year 2000. Unevangelized and Evangelized non-Christian totals come form the *World Christian Database*.

the status it now holds: the country with the third largest number of Baptist believers worldwide.

Likewise, Hudson Taylor served in China for over 50 years, founding a new missionary society, bringing about 800 missionaries to the country and personally baptizing an estimated 50,000 converts. The largest part of this happened late in his missionary career. His legacy was the China Inland Mission (today's Overseas Missionary Fellowship) and what would eventually become millions of believers in China. His influence brought the "Cambridge Seven" to join the mission. These were famous young men in England; today, it would be as if the World Cup-winning football team decided to leave everything and become missionaries. Taylor was also one of the first Protestant missionaries to contextualize the Gospel into Chinese culture (adopting Chinese dress, language and food). He was one of the first to accept single and married women as missionaries—including Lottie Moon, who become a prominent figure in Southern Baptist churches and the inspiration for an annual fundraising campaign.

For an even harder example, look at Samuel Zwemer. J. Christy Wilson tells his story in "The Apostle to Islam: the legacy of Samuel Zwemer" (International Journal of Frontier Missions, Oct-Dec 1996). Zwemer and his friend James Cantine wanted to go to a "needy field." They looked for the most difficult field they could find, and chose Arabia. No society would sponsor them, saying it was foolish for them to go to such a resistant people. Zwemer said, "If God calls you and no board will send you, bore a hole through the board and go anyway." They went to churches and raised their own support, forming the Arabian Mission. In 1890 they headed to Beirut to learn Arabic. During Zwemer's ministry he travelled extensively through the Muslim world, distributing tracts and Bibles; at many conferences he was an outspoken advocate for mission to Muslims. Still the work he started remains unfinished to this day.

When it comes to cross-cultural work, it seems long-term significance is far more important than short-term success. The role of the missionary is to raise up a core of nationals who will present the Gospel and make disciples. Start with a small group of converts, who in turn make disciples, who in turn make disciples.

If we begin with 2 people and each "generation" doubles, then by the 20th there will be more than 1 million converts. How long it should take to get from generation 1 to generation 20 is central to church growth debates. If each generation doubled every 6 months (a radically rapid pace), it would take 10 years. The Bhojpuri movement is considered rapid, and it took 15 years to reach the 10th generation.

What we need are not individuals who can evangelize large numbers, but people who can ensure large numbers *are and continue to be* evangelized, discipled, and communities transformed.

In other words, we need Roberts, Amys, Gladyses, Adonirams, Hudsons and Samuels who can identify and serve the Pauls, Patricks, Georges, Johns, and Billys within other cultures.

But, back to our original question—how many do we need? Let's assume any given missionary team can mentor a local church planting movement that will impact at least 100,000 people over the space of a decade. If so, then we arrive at a simple number: about 43,000 such teams are needed (see the chart on the previous page).

So, then: how can we recruit and send that many teams?

The 43,000 figure opens our eyes to the scope of what is required.

of taking it too literally. The unevangelized world is far more complicated. For example, many ethne are very large. How should teams be allocated? By countries, provinces, or cities? We may need more than 1 team per 100,000 people. And, some ethne are very small: perhaps only 10,000 people. Do they still need a team? Should teams be sent to "clusters" of peoples? Does an ethne having different castes within it need separate teams? How many people should be on a typical team? These are truly very difficult problems that will affect the total number of teams needed and the number of workers required.

The real value of the "43,000" figure is this: it opens our eyes to the scope of what is required. Let us assume each team has, at minimum, two people (a stretch, but the bare minimum for the word "team"). Think of D. L. Moody and Ira Sankey. With 2 people each, we need 86,000 individuals.

Does anyone come close to this? The JESUS Film has about 4,000 workers; Campus Crusade, its parent organization, has about 15,000 workers worldwide. Gospel for Asia has about 12,500. (Many of these are not cross-cultural workers.) The Navigators have 4,000 (including short-term); Operation Mobilization, 3,000; New Tribes Mission, 3,000; YWAM, 12,000 (many short-term); Wycliffe, 7,000. For denominations, the IMB has about 4,000; the Assemblies of God, about 3,500. In fact, the two organizations that come closest to the scale required are the Mormons (43,000) and the Catholic Society of Jesus (Jesuits, 25,000).

View this broadly: how can 43,000 teams—perhaps 80,000 to 160,000 people—be recruited, deployed and sent? trained and equipped? networked and informed? cared for? We might be tempted at this point to throw up our hands and say, "It can't be done." Yet the simple fact is that it *must* be done.

Look at the numbers again. Black and white digits on the page hide the people. In your mind's eye, seek them out. Billions of faces: red, yellow, brown, black, white. Men, women, children.

Old, young. Being born, living, growing up, dying—without ever once hearing the name of Jesus, without understanding the Good News. There are 4.3 billion people in this situation, with less than 10% of the mission force at work among them.

If they are to hear the Good News, workers *must* go among them, bringing them the Gospel. Whether the workers are nearby locals or foreigners from around the world, *someone* has to go. And if someone is to go, then they have to be *sent*. This implies some structure for *sending* them. They have to be recruited, given a certain amount of training, their support issues have to be resolved, and they have to get to their destination. For maximum impact and sustainability they should be linked with others so that they operate in a team. All of this has to be done,

whether we're talking about sending 1 team or 43,000.

Break it down and there are probably three "types" of sending structures: skyscrapers, pyramids, swarms... what is he talkin' about?

Let me explain.

kyscrapers are huge buildings. They must be at least 500 feet tall to be given the title. For skyscrapers, *wind* is usually a greater problem than the weight of the building itself is. Most are built using steel and reinforced concrete.

The Empire State Building, the World Trade Center, and the Sears Tower each briefly held the record as the tallest skyscrapers in the world. The Petronas Towers (452 meters high) in Malaysia took the record in 1998, but it was surpassed by Taipei 101 (509 meters high) in Taiwan in 2004.

Taipei 101 was the first (and currently only) building to break the half-

kilometer mark in height. It opened on New Year's Eve 2004 as one of the most advanced buildings ever built. It features 1-gigabit Internet connections and the world's fastest doubledecker elevators (running at 37.5 miles per hour, able to go from the main floor to the 89th floor in 39 seconds). A mass damper on the 88th floor can reduce up to half the tower's movements, stabilizing it against earthquakes, typhoons and wind. It is designed to withstand events such as catastrophic earthquakes and super typhoons that occur only once every millennia. It has over 214,000 square meters of office space, 77,500 square meters of retail space (with a six floor retail mall), and 73,000 square meters of parking space. There was some concern that its sheer weight might re-open an ancient underground fault that could

cause future earthquakes.

The interior of the skyscraper was designed by a *feng shui* master (this is Asia, after all) and is filled with symbols of financial success. The exterior design represents eight gold ingots, the ancient royal currency of China. Each "ingot" has eight floors. The number "eight" sounds like "earn fortune" in the Chinese language. And someone spent one. The entire project cost \$1.7 billion from start to finish.

Taipei 101—like all other skyscrapers—are well known. They are huge towers that draw the eye for miles around. They become well-known "addresses." Their fame can bring them good publicity—and bad publicity. As we've all seen, it can bring outright hostility. Skyscrapers are unavoidably very *public*.

Taipei 101 may soon be surpassed by several other buildings planned for 2008, including the International Commerce Center in Hong Kong, the Fordham Spire in Chicago, the Shanghai World Financial Center, and the Freedom Tower in New York.

None of these, however, are the most likely future "tallest building." The next record-holder—at least, according to its promotional literature—belongs to the Middle East. "At the crossroads of India and the Middle East, equidistant between Europe and Asia, Dubai is fast becoming the financial and cultural hub for over a billion people. At the center of that hub stands the most exclusive address in the world." The exact planned height of the Burj Dubai is kept secret, but when it is finished in 2008 it will probably be at least 700 meters (2,296 feet—nearly half a mile) high. "Only a privileged group will call it home."

Skyscrapers are certainly highly technological, very *modern* creations. Each has

had a great deal of pride associated with it. For its short time in the sun, the owners have bragging rights to "the tallest building." There have been gentle (and not so gentle) debates over which tower is highest, and what can be counted for the purpose of computing height (the general conclusion: things that are part of the architecture can be counted, but things like raido antennas or satellite dishes cannot).

Skyscrapers are also *concentrated strength*. Within their offices are high-value businesses with power and influence. They have a tremendous collection of intelligence, money, and technology. The Burj Dubai is promoted as "a structure with the power to change history."

Yet this means skyscrapers also tend to be *elite*. Only the best



Taipei 101 Skyscraper

of the best have access. The Burj Dubai says: "There are a select few who possess the vision, resources, and opportunity to live in the world's tallest building. If you have that opportunity, you are assured not just unparalleled luxury, but a place in history and in Dubai's future." A modern Babylonian tower indeed.

Ultimately, skyscrapers are *self-contained units*. The best cooks, shops, offices, recreational and fitness centers, theaters, and so forth are found here. Those who live inside may never need to interact with anyone outside because a skyscraper *has* everything a person needs.

Can a mission be a skyscraper? Think of a single agency with the capacity to recruit, screen, train, commission, send, support, and retire 43,000 mission teams or some 100,000 workers. It's safe to say such a "skyscraper" doesn't exist—right now. It would be the "Burj Dubai" of the Christian mission world. It would require a vast global presence, an enormous budget, a sizable administrative staff—and an incredible donor base.

For an idea of the size, consider the largest mission agencies today. In order to provide for a workforce of 4,000 career missionaries and 1,000 short-term workers, the Southern Baptists have created a recruitment arm, the largest evangelical missionary training center in America (if not the world), a corporate structure, and a well-polished fundraising campaign (the Lottie Moon Offering) that raises \$150 million over a single week. Yet even this event is highly politicized. The money is collected by the churches, turned over to the state conventions (e.g. the Texas Baptist Convention, the Virginia Baptist Convention, the Florida Baptist Convention, etc.) and from there transmitted to the International Mission Board. The IMB does not know the names of the individual donors. There is no way to pursue larger gifts. If any single state Convention should happen to schism from the national Southern Baptist Convention, the IMB would lose financial support which it could not easily replace.

Building a "skyscraper" capable of supporting 100,000 workers would be the equivalent of building an organization 20 times larger than the International Mission Board—both benefits and problems would be 20 times larger as well. Looking at our example of skyscrapers, we can see most buildings incrementally improve on the most recent "tallest building." Building an organization such a magnitude greater than any mission agency presently in existence would be a very tall task indeed.

It is not without precedent. There is a company that certainly is monolithic. The largest employer in the world, and the second largest company in terms of revenue: *Wal-Mart*.

al-mart is an American public corporation founded by Sam Walton in 1962. It is the largest retail store chain in the world, with 6,500 stores employing 1.8 million workers in 15 countries, having 176 million customers weekly—roughly 24 million per day. It is the second largest company worldwide in terms of revenue. In 2006, it had \$316 billion in sales and a net income of \$11.2 billion.

Wal-Mart operates a variety of stores in different cities, depending upon the market. It has discount stores, supercenters, neighborhood markets and warehouse clubs. It operates 2,700 stores (one-third of all its stores) in countries outside the United States; together, they are responsible for about 20% of Wal-Mart's sales.

However, being huge, Wal-Mart is often a target for criticism. Part of this is nationalistic: it imports a majority of its products from countries where manufacturing costs are lower. Its workers complain that it provides less than half of them with health benefits and has a generally anti-union stance. Towns and cities suggest Wal-Mart's influence causes smaller, family-owned stores to go out of business.

Certainly, being 'big' makes a company more visible. Skyscrapers have been targeted by hostile people: we all know the most glaring example. A monolithic mission agency would be more visible too. It would be criticized by those who dislike missions. It would be a target for those who are hostile. It would become politicized by workers, staff, donors, and other stakeholders. Like skyscrapers, it could possibly become overly-expensive, self-contained, proud and uncooperative. We don't need anyone else, such an agency might say. We have everything we need within our own organization. We are the best.

I rather doubt a single, monolithic agency is possible. But perhaps something a little smaller?

yramids are an ancient construction, yet one thing can certainly be said for them: they endure. There are about 100 known pyramids today in Egypt, of which the three best known were built at Giza over 4,000 years ago.

Although many possible purposes for the pyramids have been proposed, most of the evidence suggests they were built as tombs—the smallest, for wealthy individuals; the largest, for the great kings of Egypt. The Great Pyramid at Giza was 481 feet high when it was originally built—about 20 percent of the size of a modern skyscraper. (It has since lost about 30 feet due to erosion). Each side measures about 750 meters feet in length, and is oriented to one of the compass points (north, south, east, west). The pyramid consists of approximately 2 million blocks of stone, each weighing more than two tons. (One source suggests there are enough blocks in the three Great Pyramids to build a 1-foot thick wall completely around France).

Pyramids were not confined to Egypt. Some 200 pyramids were constructed in Nubia (modern Ethiopia) as monuments for their kings and queens. The Mesopotamians also built pyramids, called ziggurats, but because they used mud bricks little remains of them. Mesoamerican peoples built pyramids: the largest of these is the Great Pyramid of Cholula in Mexico. Pyramids have

been found in ancient Rome, and there are also some in China.

There is considerable debate over how the Egyptian pyramids were built, and how many people it took. Some (mostly earlier) estimates suggested a workforce of over 100,000, mostly slaves (e.g. the Jews). More recent estimates suggest perhaps fewer than 30,000 were required to built the Great Pyramids, and these were mostly rural Egyptians who worked on the Monuments during the flood season, when they couldn't work the fields. Whatever the truth of the matter, the pyramids represented a substantial investment of time and manpower.

So what can we learn from pyramids?

Pyramids are carefully engineered to be stable and enduring. To design a pyramid requires a considerable amount of engineering know-how. Every pyramid is carefully designed so each side is equal, the angles on the sides are exact, and each side is oriented to one of the cardinal points of the compass. This requires a significant knowledge of math, geometry, and astronomy.

Pyramids were designed for one particular purpose. One didn't

hold dinner, tupperware or garden parties in a pyramid. They were, essentially, tombs. Egyptians invested time in these monuments so people who lived thousands of years after them would know they were there.

Though not cheap, pyramids are less expensive. They require a substantial amount of time, manpower, and resources to build, as well as some fairly advanced know-how—but not necessarily cutting-edge technology.

Perhaps, rather than constructing a 'skyscraper' agency, we should build several 'pyramids'—moderately large agencies, each with its own particular niche to play. If a typical agency has about 1,000 workers, we would likely need abour 40 to 80 such agencies.

At present, about a dozen agencies with more than 1,000 workers each exist: groups like the Baptist Bible Fellowship, WorldVenture (formly CBInternational), Child Evangelism Fellowship, Nigeria's Evangelical Missionary Society, the Friends

Missionary Prayer Band in India, the modern Overseas Missionary Fellowship, or WEC International. These typically have budgets between US\$10 million and US\$100 million. So for this scenario, to reach our goal of 43,000 teams, we would need probably 5 times as many agencies as presently exist, each capable of raising over US\$10 million.

Is it possible to build small niche organizations rapidly? There are several examples in the for-profit world. In the technology industry, there are a few good case studies of companies that have formed recently and enjoyed explosive growth. One in particular has grown to become the 88th largest company in the world. It owes much of its success to its singular focus and its ability to work fast, measure its progress, and create opportunities. The company is: *Dell*.

ell is an American computer hardware company founded by Michael Dell in 1984. It became one of the 500 largest companies in the world just 8 years later.

Today it employs 63,000 people worldwide and manufactures more computers than any other company in the world. It maintains assembly plants in the Canada, China, Ireland, Malaysia and the United States. It has \$55 billion in annual revenue.

Dell has taken "just-in-time" delivery to an extreme. It focuses on one thing: selling computers. It takes orders via its Internet websites and by telephone (averaging 1 order every 20 seconds). Its suppliers base near Dell's assembly plants, and within 90 minutes are required to truck needed parts to Dell's plant. Within 4 hours Dell has merged the parts into a finished computer and shipped it out the door.

Dell strives to perfect this supply chain. It carries no inventory: it doesn't build a computer that hasn't already been bought and paid for. Further, its assembly lines and supply chain are one of the fastest, most efficient organizations in the world. "Eleven years ago, Dell carried 20 to 25 days of inventory in a sprawling network of warehouses. Today, it has no warehouses. And though it assembles nearly 80,000 computers every 24 hours, it carries no more than two hours of inventory in its factories and a maximum of just 72 hours across its entire operation." ('Living in Dell Time', *Fast Company*, November 2004:86).

Dell does this by measuring every aspect of its operation. "When you have basically zero inventory, it's like draining a swamp—all the stumps start to show," says Kevin Rollins, CEO of Dell. "The problems reveal themselves, and you can take immediate corrective action to fix them."

Dell is a "metrics-obsessed organization." Company engineers viewed videotapes of the assembly of computers, constantly

refining the construction of the computer models until today a trained technician can assemble one in 3 minutes.

Dell also measures how well its suppliers do their job. It rates every supplier on its ability to compete and posts their scores daily on a private web site. Future business is awarded based on past performance.

t might be possible to rapidly build up mission agencies focused on core niches. For example, we might build mission agencies targeting each of the major world regions (Southeast Asia, South-Central Asia, Western Asia, North Africa, West Africa, East Africa, etc). Or, we might build up agencies targeting major issues: sports partnerships like KidsGames, development agencies like Compassion or Food for the Hungry, or agencies focused on persecution or education issues. We might create agencies focused on particular people group clusters (like the Horn of Africa peoples, or the Iranian peoples, or the Malay peoples). We might build up agencies for megacities, or for particular religions (as Frontiers focuses on Muslim peoples).

By aggressively aiming for growth, measuring and responding to every aspect of the mission, an agency could grow rapidly to meet its particular niche. They could attract people who agree with the core mission, and funding that could help them develop. However, there are some problems with this approach.

Pyramids have a very narrow focus. Pyramid-like missions don't see much outside their interests. For example, I have had some good friends who work with the Viva Network. This is a global network of Christians in 48 countries. They are absolutely, passionately, sometimes overwhelmingly focused on children. Viva has partnerships with World Vision to meet the needs of their target group—but I doubt Viva would do much work with the elderly. They are outside its narrow focus.

Pyramids don't go out of their way to partner. The narrowness of their focus and their purpose means pyramid organizations are "fairly" self-sufficient. They often invite others to come partner in what they are doing, but rarely go out of their way to seek partnerships with organizations that have different goals. When they do, the partnerships are usually pretty formalized and important. One example is the World by Radio initiative announced by the various shortwave radio broadcasters during the time of the AD 2000 & Beyond Movement, which continues to be active today.

Pyramids are fixed to their place and their niche. This is an advantage that lends them stability and endurance, but it is also a danger: when you build a structure of steel or stone, chances are you'll end up staying right where you are. An organization can grow stagnant and dated. World trends can pass it by, and it can become ineffective. In the long run, the pyramids of Egypt are graves—monuments to Kings long dead. If they're not careful, 'pyramid' organizations run the risk of dying too.

There *is* a third model, but I'll warn you up front: it's a little buggy.

ere in Southeast Asia where we live, we have a whole little ecosystem around our house: birds, spiders, lizards, cockroaches and a bat. We even have the occasional frog and snail. But most interesting to me are the ants. I've seen three basic varieties: tiny and swift, medium and clever, and big and strong. They are pretty amazing creatures.

A few months ago, something killed a lizard, a medium-sized gecko, in our driveway. We saw the small corpse in the morning, but left it there while we went out to run errands. By the time we got home, the ants were already swarming. Fascinated, I decided to leave the lizard and see what the ants did. By early evening, those tiny, tiny ants completely stripped the lizard clean: only the bones were left.

More recently, we discovered a mouse in our house. I have been trying to catch it with a mouse trap. I put the trap outside with some cheese on it. A few hours later I noticed the medium and big-size ants had begun to swarm the trap and were carrying off little bits of cheese. "Hmm," I said aloud, then went about my business. When I checked the trap that night before going to bed, the cheese was gone. The ants had carried it off. One tiny piece at a time.

Ants are one of the most successful groups of insects in the animal kingdom. They are highly social. They form very organized colonies and nests. Sometimes these colonies can have up to a million individual ants. They have colonized almost every landmass on Earth and make up nearly 15% of the total animal weight of any given tropical rainforest. Scientists have estimated the weight of all ants exceeds the weight of all humans.

Each individual ant is born from an egg. If the egg is fertilized, the ant is a female; if not, it will be male. (Worker ants are always females.) Ants pass through larval and pupal stages before they become adults. A female might be a worker or a queen. A new worker spends its first few days caring for the queen and young ants. After that, it moves up to digging and nest work, and finally to foraging and the defense of the nest.

Only male ants (called drones) and breeding females have wings. They do nothing in life except eat until it is time to mate. When it is time to mate, they move outside and fly off. They mate in the air, and the male dies shortly thereafter. The female stores the sperm of the male, which she will use to fertilize future eggs. Then she lands and finds a place to start a new colony. She breaks off her wings (she will never fly again) and begins laying eggs (which she will do every day for the rest of her life). Some queen ants can live for up to 15 years. Depending on the type of ant, a queen can produce up to 1,500 eggs per day every day. Some colonies (such as Fire Ants) can have multiple queens—as many as 100. Ants can spread very quickly: a mature colony can produce over 4,000 reproductive breeders during the year. Nearly 100,000 queen ants can be produced per acre in heavily populated land.

Ants communicate by means of scent pheromones they leave

on the ground as they travel. For example, when an ant finds a food source it will return to the colony, dropping a *food scent* along the trail. Other ants will follow this trail, dropping their own food scents along the way. This is how ants can rapidly swarm something (like a dead lizard). As more and more ants follow the trail, each dropping a scent, the trail gets stronger and stronger—like a neon sign. Finally, when the ants have carted all the food away, they will stop going and the "scent" will eventually fade.

Likewise, if an ant is killed, its crushed body will give off an "alarm scent." This scent sends nearby ants into a frenzy, ready to respond to whatever invading bug is nearby, while also serving to attract distant ants to the "scene of the battle."

With an incredible reproductive rate and simple standards for workers, ant colonies can easily take over an area. Sometimes individual colonies join together to form huge "super-colonies." Until 2002, the largest known ant colony was on the Ishikari cost of Hokkaido, Japan: it has 300 million worker ants, 1 million queens, and 45,000 interconnected nests in an area measuring about 3 square kilometers.

In 2002, however, another super-colony was found in Melbourne, Australia, that measured approximately 100 kilometers (62 miles) wide. These ants originally came from Argnetina; there, they were highly aggressive toward each other and their "civil wars" kept their populations low. But when the Argentinian ants migrated to Australia (probably aboard container ships), something changed in their behavior. They stopped fight with each other and instead began working together. Now they are taking over the Australian environment.

he industry of ants has always been well known. Proverbs 6 says, "Go to the ant, you sluggard. Consider its ways and be wise! It has no commander, no overseer or ruler, yet it stores its provisions in summer and gathers its food at harvest." Proverbs 30:25 calls ants one of four "extremely wise" creatures: "Ants are creatures of little strength, yet they store up their food in the summer."

But ants are ants. They are insects—bugs! Compared to us, they have next to no brains. What wisdom can we learn from an ant, other than the admonition to not be lazy? How can a swarm of unintelligent creatures be intelligent?

In fact, an ant swarm has a *collective intelligence* that can be more suited to some forms of problem solving—and their "ways" have an enormous amount of wisdom for us. There is actually a study of this wisdom called *swarm intelligence*.

Swarm intelligence is the study of the "collective behavior of decentralized, self-organized systems." The term was created in 1989 by scientists. It describes systems—like ant colonies—that are made up of simple agents or creatures that interact with each other and their environment. "Swarm intelligence" has been applied to everything from com-

puter programming and medicine research to cement distribution and military operations (some examples later). Search online book retailer Amazon.com for "swarm intelligence" and you'll find 438 books on the subject. Most are in the "Professional & Technical," "Science," and "Computers" categories.

What exactly does an intelligent swarm do?

First, amazingly, a swarm operates without *any* centralized control. No single ant rules the colony, or tells all the other ants what to do. (All the queen ant does is lay eggs.)

Second, swarms can't see the whole of their environment. Ants don't have big-picture maps. When they first move into an area, they don't know where the food or predators are. Ants know as little about the area around them as we humans know about the spiritual world around us. However, an ant can see things in its immediate presence, and the ant can tell other ants some basic pieces of information about its environment (like "follow this trail to food" or "there's danger here"). They can build up a dynamic, real-time map of the environment very quickly (call this an ant's version of spiritual mapping).

Third, swarms can change their environment. They can dig tunnels, shift sand, build up structures, and adapt the land for their own use. They can literally build communities that are miles long—ant-like subways, apartments and 7-Elevens.

Fourth, swarms capitalize on randomness. It may seem like a mistake for an ant to go off wandering and not find any food. But this is their form of spontaneous creativity: a random action can open up new possibilities. It increases the chance they will find something: they aren't bound to a central plan that might fail in the face of an unforseen problem.

Fifth, swarms are very flexible. They can adapt to changing situations. Ants can cooperate to carry off large items and sort them. If they encounter more food, they can build extensions on their nest to store it. If there are too many predators in an area, they can even migrate.

Sixth, ant swarms endure. Worker ants protect the hive, and in some cases swarming ants can kill creatures far larger than themselves.

ecentralized control is perhaps the biggest asset of a swarm. It is possible because each individual agent (each ant) rapidly examines its environment, and then acts with the colony's goals in mind. Ants explore until they find a food source, and then they immediately march back to the nest. Other ant explorers come across the scent trail and immediately follow it. There's no red tape to cut, no bureacratic permission to get, no requests to file in triplicate. No leader is passing commands or sending out signals. This gives a swarm its ability to endure. You can't kill the leader and disperse the swarm, because there is no leader to kill.

Unfortunately, decentralization is a big paradigm shift for

humans. In a swarm, solutions emerge out of the tiny actions of millions of participants (the ants), not directed from a central headquarters. This makes an ant (or any other swarm system) incredibly adaptive to events on the ground, but largely uncontrollable. And, as one swarm theoretician says, "many managers would rather live with a problem they can't solve than with a solution they don't fully understand or control."

Yet, decentralization works for us too: it is actually active in many things we use on a daily basis. One example is a relatively recent piece of Internet software that has taken the world's phone calls by storm.

kype is a piece of software that runs on a computer and enables voice calls—like telephone calls—over the Internet. Someone who has Skype on their computer can call someone else who has Skype installed, or—for a small fee—can

call a regular telephone number. Skype supports video calling, conference calling, and instant messaging (chat). All are highly encrypted. Skype is available in 27 languages and is used by 4 million people in virtually every country around the world.

The program was created in 2003 by Niklas Zennstrom and Janus Friis. The two were originally involved in the creation of Kazaa, a peer-to-peer file sharing system (which was illegal). Skype, on the other hand, is completely legitimate and was recently acquired by eBay for US\$2.6 billion.

So what does Skype have to do with swarms? Like Kazaa, Skype is a peer-to-peer application. It uses the same basic idea that ants use to find food. It doesn't use one centralized computer server. Instead, peer-to-peer software uses all the computers in a network (each individual computer running Skype) to dynamically process traffic.

When a phone call is made over Skype, your voice is nearly instantly recorded by the computer and broken into little electronic packets. These are sent hurtling at light-speed over the Internet, hopping from computer to computer until they reach the computer of the person you are calling. The packets don't always use the same path although they are encrypted from end to end. The first packets that go through find the quickest route. Later packets follow this "quick route." The result: crystal-clear, high-quality phone calls. For free. With no central server to be hacked, debugged, or monitored. But Skype's not the only example. There's a far more radical one: a rectangular piece of plastic.

s you read this, there is likely a small card in your pocket that will take you "everywhere you want to be". A similar card is in the wallets of at least 600 million other people. All you probably know about the card is that it comes from your bank—or perhaps your airline, or some club you are involved in, or perhaps your favorite store. When you

need to pay a bill, you present the card and the bill is counted paid. Once a month, you get a notice of how many charges you have made, and you get to pay all or part of them. The card, of course: the VISA credit card. But have you stopped to ponder how VISA works?

A short background: VISA was founded in part by Dee Hock, a very unorthodox philosophical thinker and business manager. In 1966, the Bank of America launched a credit card program: the Bank Americard. A franchise for this card was bought by a bank that Dee Hock worked in at the time. He became the manager of the bank's credit card program, and when the program—and the whole of Bank Americard—began having severe problems due to poor design, he was nominated to a small committee to help fix some of the problems. Those problems proved insurmountable without completely redesigning the program.

The committee came to several conclusions about 'money' which led to a completely new paradigm for the little plastic card. It wasn't about the exchange of credit, but rather the exchange of value. Hock has written, "An organization that could globally guarantee and transfer monetary information in the form of arranged electronic information would have a market, every exchange of value in the world, that beggared the imagination." The problem: no existing organization of any type (bank, stock corporation, nation-state) could do this.

A small group of four people isolated themselves for several days of intense discussion. Out of this came the idea of two kinds of institutions: one where the members share certain principles and values, and the other which is governed. "The alternative to shared belief in purpose and principles is tyranny. And tyranny, whether

petty or grand, whether commercial, political or social, is inevitably destructive. People who are not self-organized and governed are inherently ungovernable."



Slowly, the founders identified a 'genetic code'—a statement of shared purposes and principles. These included:

- The organization should be fairly owned by all the participants.
- No function should be performed by any member which could more reasonably be done by a more peripheral (field-based) member.
- No power should be given to anyone that might be reasonably exercised by a lesser participant.
- All participants have the right to organize for self-governance at any time, for any reason, at any scale, with

irrevocable rights of participation.

- It should be open to all qualified participants.
- It should induce, not compel, change. As much as possible, everything should be voluntary.
- No individual, institution or combination of either should be able to dominate or control deliberations or decisions.
- All participants were free to compete in diverse, unique, and independent ways, yet be linked to sense the demands of others and cooperate when necessary for the inseparable good of the whole.
- It should be capable of constant, self-generated change of form and function without sacrificing its essential purpose, thus enabling human creativity.

Hock and his friends didn't think such an organization could be created—but it was. In June 1970 VISA was launched. It started with a handful of banks, but today is equitably owned by over 20,000 financial institutions in 220 countries.

Think about it. VISA has no shareholders. It has no central owning company. Ownership is in the form of perpetual, non-transferable rights of participation; "VISA cannot be bought, raided, traded or sold." Over 600 million people use VISA products at more than 12 million merchant locations, producing over \$2 trillion worth of business annually. "Its products are the most universally used and recognized in the world, yet the organization is so transparent that its customers, most of its affiliates and many of its members do not know it exists or how it functions."

VISA is a swarm.

an missions be a swarm? Let's put this in missionary terminology, just to open our eyes. Consider the current "buzz" about the concept of a church planting movement. Every church planting movement, we're told, has ten universal elements. So stretch your imagination with me, and consider CPMs in the context of an ant colony:

- 1. Prayer. Ants don't pray—at least as far as we know. There is perhaps one parallel. Through prayer and the leading of the Holy Spirit evangelists are led to their "person of peace"—someone who is open to the Gospel. Ants, likewise, wander seeking their "man of peace"—a food source.
- 2. Abundant Gospel sowing. Ants don't abundantly sow the gospel to make converts. However, if we are striving to make "disciple-makers," we can think of these queens as "ant-makers." They make hundreds of thousands of new ant each year.
- 3. Intentional church planting. These queens don't just make new ants for their own hive—they make queens who can create new nests. Most ant nests will send out over 4,000 females every year to start a new hive. To use a common illustration: would you rather be a sterile mule, a slow-breeding elephant, a fast-breeding rabbit—or an ant? I want to be an ant.
 - 4. Scriptural authority. It's true ants don't have a



An ant mound in Helsinki, Finland.

Bible. However, why is a Bible important? It's God's Word to us, and it gives us a basic standard of discipleship. It ensures that every disciple has the *same* basic values as every other disciple. Ants already share common values. In a sense, the instinct built into ants serves as the ant-Bible.

- 5. Local leadership. Ants don't have leaders. It's 100% lay leadership. They take "local leadership" to an extreme: every ant a leader, every leader an ant.
- 6. Lay leadership. Most church planting movements are driven by lay leaders who are bi-vocational. As the movement grows paid clergy can emerge, but it is probable that lay leadership will continue to be the main driver. Ants are similar in some ways: ant nests have a small number of queens in proportion to the larger number of workers.
- 7. House churches. Ants build contextualized houses. Some can be small, and some can be big. They are always built from local materials—ants forage, dig, bury, drag, and move dirt, leaves and wood to create the ant hill. Ant hills in a desert aren't the same as ant hills in a jungle or in a city. Church planting movements emphasize house churches, but I would argue the form of the church should be contextualized to the place. In some places, buildings are more appropriate. In some, it might be better to be in a restaurant, a theater, a business, or some other unusual place.
- 8. Churches planting churches. In church planting movements, the initial church is planted by a missionary. As the movement begins to multiply, the churches themselves plant additional churches. We can see this in ant colonies: nests plant nests. Rapidly. It's instinctively what ants do.
- 10. Healthy churches. There aren't any ant-doctors and antpsychologists, but ants still practice member care. The queen ants and female ants are kept deep inside the mount and cared for. Worker ants labor to expand the hive, to store up food, and to generally provide for the colony's health.

n addition to these ten universal elements, theories about church planting movements also list ten common factors. These factors are 'often' but not 'always' found. These are less applicable to ants but there are some parallels. They are:

- 1. Worship in the heart language. Obviously, not really applicable. (Perhaps ants sing hymns by St. Anthony?)
- 2. Evangelism has communal implications. Virtually everything an ant does has communal implications. Ants just aren't individualistic creatures.
- 3. Rapid incorporation of new converts into life and ministry. Once ants are out of their infancy they begin working. They start work in the nursery, graduate to food maintenance, and will eventually becomes a forager or a colony-defender.
- 4. Passion and fearlessness. Since (as far as we know) ants don't really have emotions, it's hard to attribute passion and fearlessness to them. Still, we can kind of see the results of seeming fearlessness. Ants are single-minded creatures. If you see an ant on the pavement, try putting your finger down next to it. Mostly, the ant will move away from you but keep on walking. Ants just don't understand the concept of quitting.
- 5. A price to pay to become a Christian. This isn't really applicable to ants, since ants do not have a choice about being ants. They are born ants and, viewed as pests, pay a price—but they do not personally *choose* to pay the price.
- 6. A perceived leadership crisis or spiritual vacuum. Ants do best in empty biospheres—areas without any natural ant predators. They can rapidly expand into these.
- 7. On the job training for leadership. This pretty much defines the life of an ant. We don't know how ants "learn" but there are no 4-year-degrees in Queen Care or Lizard Stripping.
- 8. Decentralized leadership authority. Repeat after me: every ant a leader, every leader an ant.
- 9. Outsiders keep a low profile. Once the queen ant lays the first few eggs in a new territory, and cares for them until they hatch, she buries herself deep in the colony. She continues to lay eggs, but never comes out again. That's pretty low.
- 10. Suffering persecution. Ants successfully endure nearly any level of "persecution." As one writer said, "any attempt to eradicate an ant colony is at best only a temporary solution, because ants simply cannot be destroyed."

s it possible to build a "mission swarm"? that can recruit and send 43,000 teams? that can tackle any problem it is faced with—be it lack of the Gospel, or poverty, or disease, or corruption, or war? where multiple "colonies" can become a "supercolony," while not losing their distinctives? where shared values and purpose enable the accomplishment of the overall goals?

I would be very interested in articles published here or anywhere that examine this concept. Puff it up or rip it apart, but I think it deserves time to put words on a page. In that vein, I offer the following points. A swarming mission structure would, I

think, share these values:

Its members would daily live by a common purpose and principles. A swarming mission structure would have to be built on people who agree to pursue a singular, multifaceted vision whole-heartedly. They would spend more time at the beginning getting everyone 'on board' with the purpose and values, so that later it can decentralize leadership and authority as much as possible by trusting people to make the right decisions.

Its members would prize cooperation over command or coordination. Without leaders, collective action must be cooperative rather than coordinated. Mission swarms will have to empower people with tools—like the ant pheromones—to cooperate and partner with each other.

Its members would focus on rapid reproduction. Right now, births are the primary cause of growth of the church. This is not enough to make a difference in the unreached world. We have to increase the number of converts (disciples) we make. We have to strive to increase the reproductive rate of our churches through conversion, conscientiously removing every barrier in the way.

Its members would be rapidly incorporated into work. We must increase our own ability to rapidly train disciples and get them started making disciples as well. This may mean, as much as possible, getting away from four-year schools and seminaries. We need to seek "just in time" training that provides the training needed for ministry just before it is to be used. Apprentice-ships, mentoring and coaching will likely be the tools for this. However, while we are "getting away" from four-year schools, we shouldn't get rid of them altogether. Established higher-education schools provide centers of advanced learning and research that can be invaluable.

It must join together to form supercolonies. A swarming mission must be able to connect small mission 'colonies' in specific cities, tribes, provinces, countries, regions and globally into supercolonies focused on expansion. It must become diverse, incorporating the cultural giftings and resources, in order to meet the challenges we face. It must have a significant amount of grace for each other's cultural and professional differences and methods.

Its members will refine their macroplanning while dramatically improving their microplanning abilities. There are lots of "big-thinkers" and "visionaries" in the Christian world. I have sometimes been labeled as one of these. What's interesting to me though, is ants don't have big thinkers and visionaries. There are no strategists, no researchers, no surveyors, no planners—or are there? Isn't every ant a researcher—of their area? Each ant uncovers its environment and communicates its discoveries to its near neighbors. Ant research is less like a scientist mapping the human genome and more like a radar set for a plane. They very quickly "strobe" their environment and react to the immediate vicinity. A swarming mission can and should utilize macroresearch, but we need to vastly improve our microresearch and communication ability. We need to take advantage both of the big picture

trends, and the immediate field realities.

Its members must increase their ability to measure. Everything having to do with our daily ministry work should be measured and reviewed: recruitment, training, deployment, support, strategies, execution, and so on. For example, if we are seeking mission applicants, then we need to know: what is the ideal application for each position? Where are we recruiting these applicants? How many applicants did we get? How many were accepted? Of those that weren't accepted, why did they "fall through the cracks"? How might we improve this in the future? Measuring and analyzing every single step will help us increase the quantity and quality of our work.

We must increase our accountability. It seems to me this is one area where we are better than ants. Bugs generally don't have accountability partners. If an ant wanders too far from the hive, it dies. The hive as a whole doesn't seem to weep too much or miss him. Humans are different, and we need to put strong systems in place to help each other be accountable for the plans we implement and the way we work.

We can use technology, but can't be dependent on it. Technology can empower people. It enables individual people to do more with less effort. But, we must not become *dependent* on technology—incapable of doing any work without it. The more our ministry requires technology, the less our ministries can be passed on to others who lack sufficient technology. This limits the speed at which swarms can expand.

We must be committed. We need to increase our commitment to reach the unreached and labor against our desire to build our own empire. I am not saying we should not plant new colonies—we must. These may be vast structures, every bit as complicated as a skyscraper or a pyramid. They may have vast storehouses full of resources. They may contain media centers, printing presses, Bible schools, bookstores, medical research centers, microenterprise banks, and every other thing we can think of. But at the end of the day, our *goal* is not to build state-of-the-art nests but to make ant-makers. We would do well to keep this in mind.

S Lewis once said, "writing is like herding sheep: if you leave a gate open, some of the sheep will wander through it." So, let me close some of the gates by clarifying what I am *not* saying,

Parachurch versus church. I am not making a statement about which is better—the agency or the church. Humans are not ants, and we use multiple forms of organization. I believe both churches and agencies can make a significant impact among the unreached. Agencies generally have more experience at doing this than modern churches because they've been doing it longer, and both can do it better than they have in the past. Both, I think, can benefit from swarming concepts. But most important, both should spend more time concentrating on

improving what they do rather than concentrating on how they are the 'best' or theologically 'right' option.

Nationals vs. expatriates. Swarms recruit from where there are workers, and send workers to where there are none. Locals obviously find it easier to bridge the cultural divide but they aren't always the best choice. Expatriates may have certain advantages, but they aren't always the best choice either. Swarms use what they can find—whether it's a local or an expatriate.

Professional versus lay workers. I believe workers should be trained, and trained well. I think it's better to give workers adequate salary and resources than insisting each work to raise his or her own support from distant sources, but I know there are powerful arguments for self-support. An ant colony finds all its own support from the land where it is placed. Every ant within the colony works to provide for every ant—the ant-makers, the ant-foragers, the ant-defenders, and the ant-workers. The old saying, "One for all and all for one" fits them well. Perhaps it would be best to look at a continuum. Ants progress from infant to supported nursemaid to bi-vocational colony-builder to self-supported and supporting forager. Could this be done in missions, too?

Big structures versus little structures. This isn't about complexity of structure. Ant colonies can be every bit as complex as pyramids or skyscrapers—they're just less noticeable and more mobile. Some ant colonies, as we read, are huge. Some ant colonies are in small little cracks on the sidewalk, but no less integral.

Mission versus non-mission. Swarming does not exclude things like business as mission, medicine, development, crisis response, humanitarian relief, etc. These are important parts of being a blessing. I think there is clearly a place for this within the concepts of a colony and a swarm.

hat should be done from here? I would like to propose an ongoing discussion—through chats, articles, comments, blogs, whatever—about these concepts and how they might be better implemented.

When ministries are being launched, how might we make them more I ike ants from the start? How can we define our mission and principles in such a way that everyone clearly understands them and signs on? How do we decentralize power? How do we give individuals authority, yet with safeguards to prevent its misuse?

How do we better enable basic communication? We need to have some simple ways to say 'food here' or 'danger here.' Maybe it's by cell phone SMS, maybe by email list, or maybe at a morning meeting. The more complicated the system, the less likely it is to be used: ants just use their noses.

How do we better interact with others, so that we form supercolonies? How do we get away from partnerships that must be formalized, and into simple cooperation? How do we identify the best places for planting new swarm colonies? How do we logistically get people there?

These are some of my questions. How would you answer?