

**Statement of
Richard L. Trumka, Secretary-Treasurer
American Federation of Labor and Congress of Industrial Organizations
before the
U.S.-China Economic and Security Review Commission
on
China's Impact on the U.S. Auto and Auto Parts Industries**

July 17, 2006

Mr. Chairman, members of the Commission, my name is Richard Trumka. I am the Secretary-Treasurer of the AFL-CIO and I serve as chair of the federation's Industrial Union Council (IUC). I appreciate the opportunity to present the federation's views on the development of China's manufacturing and automotive industry. I also want to acknowledge and thank the Commission for the groundbreaking research work you have been engaged in.

As the Commission is aware from previous appearances before this body, the AFL-CIO has continuously challenged the unfair trade practices by the Chinese government. Last April, Bob Baugh, the Executive Director of the IUC, testified before this Commission about the Chinese government's currency manipulation, labor rights violations and illegal industrial subsidies. Since that time the AFL-CIO has continued to press for currency manipulation legislation with our business partners (H.R. 1498, the Hunter-Ryan bill).

On June 8th, the AFL-CIO, together with Representatives Ben Cardin (D-MD) and Chris Smith (R-NJ), filed a 301 petition charging that the Chinese government's systematic and egregious violations of workers' rights are in fact an unfair trade practice under U.S. trade law. We are awaiting a decision from the office of the U.S. Trade Representative. A copy of the petition will be submitted to the USCC for the record.

This morning I am here because U.S. manufacturing has been the target of the Chinese government's export strategy. Automobile production, the cornerstone of an advanced manufacturing economy, is a primary target. With an export-led development strategy aided and abetted by a range of unfair trade practices and fueled by internal and external investments, China has become the third largest economy in the world. It is expected to pass Canada within the next two years to become the number one exporter into the U.S.

The AFL-CIO and our Industrial Union Council (IUC) affiliates are deeply concerned about the direction of our trade policies and practices with China. The explosive growth of Chinese manufacturing over the past decade, especially the past five years, its projected trajectory, and the policies that drive this growth, pose troubling questions for our nation's industrial base and national security. The entire American economy pays a price for the decline in manufacturing.

Auto and the Industrial Infrastructure

The automotive industry is the single most important industry to American manufacturing. Manufacturing accounts for 16 percent of the nation's GDP, and the automotive sector makes up 25 percent of all manufacturing, some 4% of GDP. Auto is the cornerstone of an advanced manufacturing economy, not only because of its enormous economic impact but also because it involves the most complex integration and assembly of leading edge technologies and products. From the glass, rubber, steel, and electronics to engines, transmissions, design, engineering, R&D and more, an automobile encompasses the critical elements of this nation's industrial infrastructure.

Aerospace, like auto, is another example of advanced manufacturing that requires an integration of complexity and technology of the highest order. To have vibrant advanced manufacturing sectors like these, a nation must have a strong, innovative, diverse and broad industrial base as a foundation. It is a base that pays dividends over and over.

Most important is the broader role manufacturing plays throughout the economy. It is the productivity leader that helps expand the economic pie. It accounts for two thirds of all R&D investment and is the primary source of innovation. It is the leading purchaser of new technology and financial and technical services. It is the leader in new work organization and work process. At the community level manufacturing jobs have been a critical economic ladder with rungs at all levels. And, because of the web of supplier industries and the relatively high wages and benefits, each manufacturing job, it is estimated, is associated with up to four additional jobs.

Today the dividends and benefits that the auto sector and the rest of the industrial base provide for our economy are threatened. That is why we are so concerned about the trade policies that are eroding our foundation. They have failed in nearly every dimension. They have failed to create good jobs and healthy communities at home. They have failed to foster equitable, democratic, and sustainable development abroad. They have failed to safeguard our long-term national security interests. And they have utterly failed to ensure that American producers and workers are able to compete successfully in the global economy.

Trading Production for Debt

The past five years have been especially brutal for manufacturing. Unlike previous downturns, this decline is structural, widespread, and deep. Since 2000 the U.S. economy experienced a net job loss in goods-producing activities. More than 40,000 manufacturing establishments closed and we lost nearly 3 million manufacturing jobs, 17 percent of the manufacturing workforce. Not a single manufacturing payroll classification created a net new job. Studies by the Economic Policy Institute, our own Industrial Union Council and others confirm that over half, this job loss is trade related.

The crisis hits everywhere and everyone. State and local tax revenues withered, undermining important public services. Minorities, the south, and rural areas were hit particularly hard, as textiles, clothing, furniture and more closed or went offshore.

Within manufacturing, nearly every subsector suffered from double-digit employment declines—48 percent in textiles, nearly 30 percent in computer and electronic parts and primary metals, and 23 percent in machinery (see fact sheet addendum).

Just as troubling, the past five years of job growth were the weakest on record at this stage in the business cycle, and real wages actually declined. The entire net job growth was in non-tradable service-providing activities--primarily credit intermediation, health care and social assistance, waiters, waitresses and bartenders, and state and local government.

What we got in return for the dismantling of American manufacturing is the sad but true fact that empty cargo containers are our largest export to China. Our imports from China continue to outstrip our exports by almost six to one, making this by far our most imbalanced trade relationship with any major trading partner.

We also get to borrow an unsustainable two billion dollars a day to pay for the goods we consume that we do not produce as a nation. And, in the end, we get the danger of the growing debt load that trade deficits produce. The nearly 2 trillion in U.S. dollar assets held by China and Japan poses a threat to the stability of the world economy.

Eventually, we must either produce more of what we consume, or be forced to consume less. Unless there is a change of direction, the threat of a steep global economic downturn is real. We believe that increasing production and exports is the best way to reduce the trade deficit, but therein lies the problem ... if you don't make things you have nothing to trade, and if we have nothing to trade the deficit cannot be solved. Our trade policies and our national economic policies both need to focus on strengthening our manufacturing sector, so that we can close the trade deficit without a major recession.

Free Market Myths

The free market economists' response to all this was to tell us there is no cause for alarm – that what we're witnessing is merely the natural maturing of our economy — heavy production and labor-intensive industry will move to lower wage labor markets, like Mexico or China, while the U.S. retains higher skilled mental labor and service jobs. The process, they claimed, is inevitable and in the long-term, benign.

Those knowledge jobs that economists claimed would take the place of lost manufacturing jobs in the globalized “new economy” never appeared. It turns out manufacturing has been a canary in the coal mine for other sectors of the economy that are only now learning about being digitized, outsourced and offshored. Since 2001, the information sector lost 17% of its jobs, with the telecommunications work force declining by 25%. Computer systems design and related occupations lost 9% of its jobs. Even accounting and bookkeeping employment shrank by 4%. Overall some over 725,000 professional, business, and information service jobs disappeared since 2001.

At our universities engineering enrollments are shrinking because there are no jobs for graduates. The talk about shortages of engineers is nonsense. Offshore outsourcing and offshore production have left the U.S. with rising unemployment rates among the highly educated, as well as stagnant or falling real wages.

For a majority of American workers, current globalization policies have brought deindustrialization, an attack on unions, declining real wages and vanishing pensions and health care. For manufacturing, it has become a cancer that is destroying our technical capacity to innovate and produce. This sorry record is not benign, but it is a prologue for our future – unless we change course soon.

Offshoring Investment in Industrial Capacity

There has been a precipitous decline in domestic manufacturing investment, which fell nearly 17 percent in real terms from its peak in 1998 and 2004, while investment in manufacturing structures declined 44 percent over the same period. At the same time, many of the same firms are made and continue to make record offshore investments in R&D, engineering, design, and production jobs.

The investment flows portend future production and exports to the United States. Claims that outsourcing is matched by insourcing (foreign investment in domestic manufacturing) are meant to mislead. Insourced investments are overwhelmingly changed of ownership: i.e. there are no new jobs or production facilities. Not so in China, where these are startups and expansions. The foreign direct investment (FDI) flow into China reached \$62 billion in 2004 and continues to soar. Seventy percent of China's FDI is in manufacturing, with heavy concentration in export-oriented companies and advanced technology sectors. Contracted (future) FDI projections are more than double the actual level today, with U.S.-based firms leading the way. R&D, engineering, and design are all part of the manufacturing investments and jobs that the Chinese government is aggressively pursuing.

In a report to the USCC, Charles McMillion of MBG Information Services showed that as of June 2002 over 400 of the largest companies in the world had invested in China, including companies such as Microsoft, General Electric, Sony, Exxon-Mobile, Royal Dutch Shell, General Motors, Toyota, Volkswagen, Boeing, Matsushita, Siemens, Toshiba, Intel, Kodak, Hewlett-Packard, and IBM. He also noted that U.S.-based firms had been China's largest investors for three consecutive years, including 33,000 projects at the end of 2001 involving investments of \$35 billion and total contracted investment of \$67.8 billion. U.S. FDI to China in 2001 also hit a record high of \$4.9 billion, with projects concentrated in the machinery, automotive, computer, communications, energy, infrastructure, finance, insurance, and oil and petrochemical sectors.ⁱ According to Chinese government sources, global firms had already set up nearly 100 high-tech R&D centers in China and 124 identified in 2001.ⁱⁱ Both the number and the quality of these centers have accelerated rapidly since that time. McMillion notes the lack of any authoritative count of R&D centers involving global firms now in China, or any comprehensive assessment of their activities.

The trend in auto is just as apparent. In the past two years, Delphi, Ford and GM have all announced major R&D to production investments in China. All have issued announcements about the expected rapid growth in imported parts from China. A recently leaked memo from GM to its suppliers told them they must start doing a percentage of their business in China. Up until this point the automotive and parts sector has been a domestic stronghold for manufacturing. Its outsourcing has been regional to Canada and Mexico. These new Chinese investments and demands upon suppliers will drive the industry offshore.

Danger Signs: Losing Industrial Capacity

The closures, declining domestic manufacturing investments and massive investments in Chinese facilities show up in real terms. A close look at manufacturing's recent performance sheds much light on the sector's shortcomings. Although the headline indicators suggest U.S. manufacturing output may be recovering, other major performance measures reveal historically weak growth or even continued decline. The following information is drawn from a soon to be published report by the AFL-CIO and US Business and Industry Council data shows the following major trends for these indicators:

- *Manufacturing capacity* growth and the recovery in *capacity utilization* have been very weak since 2001 and capacity growth in high-tech industries has slowed compared to its dramatic growth of the late 1990s, and even relative to its modest growth during the previous three decades. Since 2001, non-high tech manufacturing capacity has declined. With notable exceptions (transportation equipment, aerospace) capacity levels for many major manufacturing sectors, including durable goods industries important to the defense base—primary metals, fabricated metal products, machinery, and electronic equipment, appliances and components—have contracted since 2001. Manufacturing capacity utilization is still below its historic average of 79.6 percent, and aside from the recent trough, remains lower than every year since 1983.
- Another critical indicator of U.S. manufacturing competitiveness, *import penetration*—the share of the U.S. market held by imports—also has been declining. A US Business Industry Council (USBIC) study of IPRs for 123 six-digit NAICS-based products, including every manufacturing sector that has ever been judged to be a major contributor to the country's prosperity as well as to its security shows an across-the-board increase of 23 percent—from 25.5 percent of domestic consumption to 31.4 percent—between 1997 and 2002 alone. That is, imports grew from one-quarter to nearly one-third of the total value of this large, diverse group of items consumed domestically in only five years.
- There is substantial evidence of a strong *link between trade deficits and the loss of manufacturing establishments and jobs* since 1998. Many studies have shown that U.S. trade policies have contributed to these deficits, costing millions of U.S. workers their jobs. The Economic Policy Institute (EPI) researchers estimate that

the U.S. trade deficits with NAFTA partners Canada and Mexico resulted in a net loss of over one million U.S. jobs, and the U.S. trade deficit with China between 1989 and 2003 caused a displacement of production that supported 1.5 million American jobs. EPI also estimates that escalating trade deficits with China caused the loss of 440,000 manufacturing jobs over the past two years. Empirical studies by Cornell researchers and the AFL-CIO Industrial Union Council's (IUC) Job Export Database Project further support the link between imports and offshoring with plant closures and mass layoffs.

- *The closure of more than 40,000 manufacturing establishments and the staggering sector by sector job loss between 2001 to 2005 represents a direct loss of industrial capacity.*
 - Computer and electronics: 543,900 workers or 29.2 percent
 - Semiconductor and electronic components: 260,100 or 36.7 percent
 - Electrical equipment and appliances: 152,500 or 26 percent
 - Vehicle parts: 153,400 or 18.6 percent
 - Machinery: 289,400 or 19.9 percent
 - Fabricated metal products: 235,200 or 13.3 percent
 - Primary metals 144,800 or 23.5 percent
 - Transportation equipment: 246,300 or 12.1 percent
 - Furniture products: 58,500 or 13.4 percent
 - Textile mills: 158,500 or 43.1 percent
 - Apparel: 220,000 or 46.6 percent
 - Leather products: 24,700 or 38.3 percent
 - Printing: 159,300 or 19.9 percent
 - Paper products: 122,600 or 20.4 percent
 - Plastics and rubber products: 141,400 or 15 percent
 - Chemicals: 94,900 or 9.7 percent
 - Aerospace: 46,900 or 9.1 percent.

Danger Signs: The Offshoring of Innovation

The impacts of an eroding domestic manufacturing base on national security stem not only from transnational firms moving R&D, engineering and design offshore with their plants, but also from the military's growing reliance on commercial cutting-edge technology. Defense procurement policy has put rapidly increasing emphasis on "dual-use" technology products. The rationale was that drawing on the often more innovative civilian sector would yield not only more up-to-date products, but big cost savings.

The ability of a firm to design, innovate, and improve on defense-critical technologies or devices that it produces for defense markets, increasingly depends on its ability to preserve and draw upon the technology edge it has obtained in its commercial business. As military products become more reliant on commercial advanced technologies, technology transfer from commercial technologies into defense-critical products requires

a close relationship between the Pentagon on defense contractor customer and the suppliers of these technologies. However, as the commercial industrial base globalizes, the loss of domestic production facilities can lead to the loss of innovation capabilities.

Specifically, the migration of manufacturing offshore is associated with the following trends:

- Weakening innovation capabilities of domestic industrial sectors;
- The transfer—deliberate and unwitting—of cutting-edge technologies and know-how to economic rivals and potential military adversaries; and
- Foreign countries establishing industrial and technology policies aimed at enhancing their technological capabilities relative to America's.

The same trends are apparent in the advanced materials sector. A report by the National Academy of Sciences on the globalization of materials R&D concludes that, as U.S. materials manufacturing disappears and moves offshore, domestic materials R&D capacity has diminished. U.S. companies, attracted to the growing availability of often lower cost foreign intellectual resources, are shifting their materials science and engineering R&D activities to follow their manufacturing operations overseas.ⁱⁱⁱ The net result is the erosion of U.S. leadership in advanced materials R&D.

The NAS reports on several instances of materials' technology that illustrate this trend:

- *Metals*. Research into the production, processing, and development of metallic materials in the United States has been declining since 1998. Metal producers do very little alloy development anymore, and companies in metal consuming industries also have decreased their efforts. Evidence suggests that the United States is losing its leadership role in metals R&D. There are no signs that this trend will be reversed any time soon.^{iv}
- *Superalloys*. Superalloy R&D has declined significantly over the past decade, as U.S. firms confront slower demand and higher costs, and many face financial difficulty. Attracted by lower costs, superalloy manufacturers increasingly are locating their production offshore. The NAS predicts that U.S. companies that move overseas will remain competitive and survive “only to the extent that they are privy to future developments at non-U.S. laboratories and plants.”^v
- *Composites*. Composites are a critical technology used in major defense systems such as the F-22 fighter jet, ballistic missiles and orbital satellites. Once unchallenged, other countries in several areas have supplanted U.S. leadership in composites. Europe now leads in composites manufacturing and modeling, and there are fewer U.S. commercial carbon-carbon manufacturers and far fewer companies providing oxidation coatings than 10 years ago. U.S. defense and commercial programs—the Joint Strike Fighter and Boeing's 787 Dreamliner—are outsourcing production and supporting R&D in composites overseas. The NAS concludes that without long-term investments in composite research, the United States risks losing the ability “to exploit the promise of composites” and industry could “stagnate and

eventually become uncompetitive” with foreign companies maintaining their own research programs.

- *Electronic and Opto-Photonic Materials*. These are critical technologies for maintaining leadership in semiconductors. This industry and its material supply chain are moving toward a global processing and manufacturing infrastructure that is taking some of its R&D capacity with it. Many large electronic materials suppliers have globalized their manufacturing base and support laboratories.^{vi}

The ceramics^{vii} and catalysis^{viii} industries have been following similar trajectories. As manufacturing in these sectors confront growing foreign competition—especially from China and other Asian nations—and globalize their production, their R&D activities also are globalizing, and U.S. leadership in these critical technologies has declined.

The flip side of the migration of U.S. innovation capabilities offshore is the buildup of other countries’ R&D capacity. The strengthening of foreign technology capability does not always result from market forces and commerce-facilitating progress in communications and transportation. Instead, this development often results from multinational companies taking one of three tacks:

- Actively exploiting the business environments created by U.S. trade policy – for which they have lobbied hard – that encourage them to supply the U.S. market even for highly sophisticated manufactures from low-cost foreign facilities;
- Responding to foreign government carrots and sticks; or
- Formulating various investment strategies synthesizing these two approaches.

The carrots and sticks approach by foreign governments is a direct reflection of a broader strategic and tactical approach to capture markets and technological dominance in specific sectors.

China’s Pillars: Targeting U.S. Industrial Sectors

China and other countries have adopted broad industrial and technology strategies aimed at building up their capacity in cutting edge technology areas across the manufacturing sector. Many of these policies include strong incentives designed to attract foreign investment in R&D and production in advanced technology areas, which encourages transfers of technology and production capacity offshore, including some of the design for civilian technologies with defense applications.^{ix} The USCC has helped document the practices of the Chinese government.

It is clear one strategic element of China’s development strategy is to build export platforms across manufacturing. Another is the designation of several industrial sectors, most notably the *electronics and telecommunications and automotive industries*, as “pillar” industries, that are strategically important and therefore deserving of government funding and assistance. Though not a “pillar” industry, aerospace also receives a great deal of Chinese government support. For example, the USCC has

reported that China has made development of the semiconductor sector a national priority, and is fostering this development with government support for research and development, preferential tax treatment, and the use of the technology standard-setting process to favor its domestic firms.^x

China is no longer just playing catch-up with the United States and the other developed nations regarding basic manufacturing production and technologies. As the USCC has pointed out, China is developing and producing technology that “is increasing in sophistication at an unexpectedly fast pace. China has been able to leap frog in its technology development using technology and know-how obtained from foreign enterprises in ways other developing nations have not been able to replicate.”^{xi} That is, China is rapidly becoming a source of innovative technology, and its technology research and development activities are steadily and substantially expanding. Since it has become central to the global supply for technology goods of increasing sophistication, China has gained increased leverage in global systems of production.^{xii} We share the USCC’s concern that this central role raises “the prospect of future U.S. dependency on China for certain items critical to the U.S. defense industry as well as vital to continued economic leadership.”^{xiii}

Losing Our Capacity: Seattle to Beijing

Today, the American automotive industry stands at the precipice, and the aerospace sector is another critical industry witnessing a migration in manufacturing accompanied by diminished R&D capacity at home. Commercial aircraft has been one of the leading exports this nation produces without which our trade deficit with China would be far larger. However, one should not be misled by current headlines trumpeting new sales of the new 787, the aircraft Boeing has bet its commercial aviation future on.

Stanley Sorscher, a staff member of the International Federation of Professional and Technical Employees (IFPTE) local union in Seattle, Washington representing the 20,000 engineers, scientists, technical and professional employees at Boeing, testified before the U.S. House Armed Services Committee about a long-term decline in aerospace scientists and engineers. According to Sorscher, between 1986 and 2001, the number of U.S. aerospace scientists and engineers fell by 83 percent, from 145,000 to 21,000. At Boeing his unit has since lost another 5,000 S&E workers, paralleling the 18,000 machinists’ jobs lost over this same period at Boeing.^{xiv} “This decline,” he asserted, “dismantles our technical and manufacturing communities from within, eroding the network of relationships, expertise and authority developed over decades.”

Boeing has long claimed the key to success in commercial aircraft is its technological leadership in wing design and composite materials technology. All the laid off machinists and engineers will not be called back to work as 787 sales take off. Only 1800 jobs will be created in Seattle for final assembly of the aircraft. It is estimated that seventy percent or more of the 787 will be produced offshore, primarily in China and Japan. The sacrosanct wing design and composite work will be done over there. Meanwhile, tens of thousands of skilled workers’ and engineers’ jobs will be lost to the domestic economy. As Sorscher rightly points out in his testimony, these “foreign firms acquire the

knowledge, skills and experience embodied in the work packages sent to their domestic firms ... They will inherit the competitive advantage of future learning curve benefits. They will learn certain institutional lessons while our body of retained knowledge erodes.”

What has happened to manufacturing and what is happening at Boeing also beg the question about the nation’s true industrial capacity. Capacity and utilization rates are only a partial gauge of industry health. High utilization rates only gauge the utilization of what is operating, but do not tell you about the loss of existing capacity that has occurred through closures. And, capacity figures do not measure the skills, R&D, engineering, and design that are the backbone of production.

The Boeing 787 story provides a cautionary tale of just how quickly a major technology leader engaged in advanced manufacturing can become a net importer of the parts they used to produce domestically. This is the type of assault the entire American industrial base has been undergoing since the late 1990’s. There are serious implications for our nation’s future in continuing to ignore the actions of governments, transnational corporations and the financial interests that drive this process.

National Security and the National Interest

Our one-sided trade relationship with China is unfair and dangerous to our national economic interest. This relationship has put us at risk because it has already undermined the health of our industrial base and it now threatens our single largest industry. When looking at the American manufacturing experience over the past five years the implications for our economic and national security could not be any clearer.

From a national security point of view, the startling loss of 40,000 manufacturing establishments and over three million jobs directly impacts the greater industrial base that meets both commercial and defense needs. Many of the engineers, scientists, and skilled workers that work on commercial products one week, are the same ones that work on defense applications the next. This vital link between production and innovation is being severed as manufacturers move plants, R&D, design and engineering offshore, a move aided and abetted by our own trade and tax policies.

For the nation, the loss of skilled production workers, scientists, engineers, and technical and professional workers across the manufacturing sector is a devastating blow to our technical capacity to make things. For the economy, it means that the next best idea, the next innovation, the next generation of products, and the next investment will be made somewhere else, not in the United States.

The diagnosis is sobering. The loss of our manufacturing capacity—and the intellectual and technical capability to make things—is a profound threat to the nation’s economy and our national security. The national interest will best served when we can assure that the seed corn of our future, a vibrant manufacturing sector, is being planted here and not in some other nation’s economy.

The U.S government must take action to assure that workers here and abroad will benefit from trade. We must enforce our existing trade laws and have our trading partners live up to their agreements. Workers' rights violations and currency manipulation by the Chinese government must be addressed. We must assure workers' rights and environmental standards are addressed in our trade deals and at the WTO with the same level of attention and force of law that commercial property and financial rights receive.

At the same time, we need to examine our own trade and tax policies that encourage the off shoring of our production and innovation capabilities. Finally, we must, as a nation, invest in the future of domestic manufacturing. The UAW's proposed Marshall Plan for the auto industry and the Apollo Plan for energy independence provide a starting point for the types of strategic industrial policies this nation needs for a vibrant manufacturing economy.

The USCC is a critical bipartisan body that can help address the pressing concerns we have expressed today about the actions by the Chinese government that are undermining our industrial base. We look forward to continuing to work with you on these matters.

ⁱ Charles W. McMillion, "China's Very Rapid Economic, Industrial and Technological Emergence," under Contract No. C4892-2-002, for U.S.-China Security Review Commission, MBG Information Services, June 5, 2002, p.8.

ⁱⁱ McMillion, "China's Very Rapid Economic, Industrial and Technological Emergence," (2002), *ibid.*, p.8.

ⁱⁱⁱ NRC, *Globalization of Materials R&D* (2005), *op.cit.*, p.85. (old)

^{iv} NRC, *Globalization of Materials R&D* (2005), *ibid.*, pp.74-77.

^v NRC, *Globalization of Materials R&D* (2005), *ibid.*, pp.50-52, Box 2.5

^{vi} NRC, *Globalization of Materials R&D* (2005), *ibid.*, pp.77-79.

^{vii} NRC, *Globalization of Materials R&D* (2005), *ibid.*, pp.69-70.

^{viii} NRC, *Globalization of Materials R&D* (2005), *ibid.*, pp.84-88.

^{ix} USCC (2005), *op.cit.*, p.97.

^x USCC (2005), *op.cit.*, p.32.

^{xi} USCC (2005), *op.cit.*, p.86.

^{xii} USCC (2005), *ibid.*

^{xiii} USCC (2005), *ibid.*, p.85, 88.