

THAT BLASTED HERITAGE - CONFRONTING THE DILEMMAS OF INDUSTRIAL HERITAGE

Sarah Laurence

1. What is industrial heritage

The heritage of our industry is as much a part of our history and our past as our more domestic relics. Virtually every part of our lives owes something to industry and engineering: transport, communication, health, food, water supply and sewerage systems, entertainment and our daily convenience and comfort.

However, in a country like Australia, which has long prided itself on forging its past on the sheep's back, on developing its character in the outback or in rural enterprise, it is not surprising that the recognition of industrial heritage has fallen well behind that of the 'softer' heritage of homesteads and houses.

This is not to say that industrial heritage has been completely ignored. The more aesthetic or user-friendly sites are well represented in our heritage registers: railway stations, mine sites, woolstores and mills form the bulk of officially represented industrial heritage.

The South Australian Maritime Museum in Port Adelaide, formerly Elder's Bond and Free Stores built the mid-1850s, is a good example of this. These former warehouses were successfully converted to house the Museum which opened in 1986, an action readily accepted by both heritage professionals and the general public alike.

The conversion of the former Lion Brewery and Malthouse in North Adelaide as part of the function centre and facilities provided by the adjacent Lion Hotel, is also an example of the recognition and acceptance of earlier and less hostile industrial sites.

Why has industrial heritage for so long been seen as the poor relation to other aspects of heritage? Why have the woolstores and flour mills been preserved, restored, cared for while the abattoirs, smelters, steelworks and car manufactories have not? Why has success been limited?

2. What are the dilemmas

Industrial sites, and in particular later 20th century sites, are arguably the most difficult reminders of our past to deal with in terms of conservation and preservation as well as public acceptance.

The heritage value of industrial and engineering sites, such as steelworks and power stations, large bridges and dams, is easily identified. However these places are also often difficult to assess, their design and construction is considered too ugly or utilitarian to be of any significance, and they are often daunting in their complexity and size.

Assessment

Although the same of assessment criteria apply to industrial sites as they do to other sites, the application of them to industrial sites is often not as clear cut.

One of the main issues is that of technological change, which has certainly sped up in the last half of the 20th century. This means that the factor of time or age of an item may have little relevance to its significance.

Accelerated technological growth makes it more and more difficult for such places to be identified and evaluated within existing heritage parameters.

It is easy to assess Chateau Tanunda or Seppeltsfield for example, as being of importance technologically to the early winemaking industry in South Australia.

The system of steam elevators, strippers and crushers supplemented by a gravity feed system housed within the main winery building at Tanunda, was considered 'state of the art' in the early 1890s.

The large corrugated winery building constructed on the hill slope at Seppeltsfield in 1888, also utilised gravity feed on a large scale and, according to one author, 'marked the beginning of "industrial looking" wineries'.

... but is it as easy to assess the modern wineries – the stainless steel and 'pseudo-petrochemical plants' of the newer wineries scattered about the Barossa?

I believe that we need to think beyond assessment when dealing with industrial sites. Listing is only the first part of the process – places are listed to preserve them, but other issues, I think, also need to be addressed and I will talk about these shortly.

Materials

One of the main reasons that attitudes towards later industrial sites tend to be cold or at best lukewarm lies within their very fabric.

The use of materials such as brick and stone in earlier 19th century industrial buildings engenders these sites with a certain presence, a sense of longevity and solidity that the iron and glass of later industrial buildings does not.

A well detailed masonry building (such as those at Islington, built in the early 1890s), will, even to the lay person, be seen to have more 'heritage' value than the iron sheds of the former Holden factory at Woodville. Both places have played a significant role in the development of the state: Islington played a fundamental part in the operation and development of the railways; the Holden's factory, established when the company was one of the largest industrial concerns in the country, was responsible for a large part of the production of the first 'Australian made' car, the Holden.

By their very nature industrial and engineering sites are built for a very specific function or purpose. Once that function or purpose ceases to exist, there may be little other use for the place: a bridge can be used for little else apart from a bridge; a power station for little other than the generation of power (with the exception perhaps of the Powerhouse Museum in Sydney, housed in the former Ultimo Power Station, but notably with some major additions!)

Other dilemmas arise, even when such places continue in some form of their previous use.

Changes to social standards and workplace legislation over time have also had an impact on the viability of industrial sites. At a time when many significant sites were built or in operation, safety regulations and employment laws were far less stringent than they are today. Plant, which was an integral part of a site may no longer comply with current safety legislation.

The former Osborne Bulk Handling site was a good example of this. Dating from the mid-1920s, it comprised a coal-fired power station (which supplied the metropolitan area), a rectifier room to convert the power current from AC to DC, conveyor systems and Kampnagel cranes to load and unload coal and other bulk materials.

From the workers' point of view, working conditions were extremely unpleasant due to the dirty, gritty exhaust being generated by the burning of coal at the power station. This, combined with the constant rumbling of the conveyor belts would make it difficult for operators to stay awake! The cranes, dismantled when the site was closed in 1991, would certainly not have met current safety or capacity standards.

As many such sites were built for a financial gain, so their ongoing maintenance was covered by that gain. Once they are no longer economically viable, there is little to support their ongoing maintenance, let alone conservation.

The brick kilns at Nuriootpa are an example of this. Regular firing for the production of bricks and terracotta products ensured that the kilns were well maintained during their operational life. Now that they are no longer used, these kilns have undergone an alarming decline – the fabric is no longer dried out by the firing and this, combined with the previous effects of the heat, have meant that the kilns are now on the verge of collapse, virtually beyond repair.

Scale

The sheer size and complexity of some industrial sites is daunting, posing some interesting questions. Is it practical to conserve the whole site? Which elements are more important than others? How can the site be best represented?

More recent sites tend to be larger or more complex, because of technology and increasing production requirements, than earlier sites.

The remains of the Wallaroo smelters, including the Hughes chimney stack (36m high), represent what was once the largest smelter site in South Australia, producing about 5,300 tonnes of copper a year between 1860 and 1913.

On the other hand, the Pasminco Smelters at Port Pirie, towered over by the 205m high chimney, has a total annual output of lead, zinc and silver of 740,000 tonnes.

Apart from the obvious differences in the complexity and technology of the two sites, you can imagine that if there are considerable issues associated with conserving a 36 meter high chimney, there would certainly be some relating to a chimney 205 meters high!

3. How to deal with this

So how can we better preserve and recognise the state's industrial legacy?

Listing

Heritage listing is one way of achieving this, at least on paper. Entering a place in a state or national heritage register will give recognition and a record of a place's heritage value, and in most cases will even ensure its preservation by preventing demolition.

Where the relationship between the heritage value of the place and the physical evidence is not clear cut, heritage listing may not be the immediate answer. Listing would recognise the historical value of the site, but may not necessarily preserve it in the long term.

This problem is well demonstrated by the following examples.

The Gepps Cross abattoirs and sales yards site was opened in 1913 and operated for over 60 years. There is (was) no question that the whole site was of great significance to the state by providing a centralised and hygienic system of meat processing and distribution. The scale of the undertaking and its impact on the health and amenity of residents in the Adelaide metropolitan area are on a par with the provision of reticulated water and deep drainage in the 19th century.

Several attempts have been made to list parts of the site over the years, but it seems that listing of the actual slaughterhouses, or the site as a whole, was too difficult to achieve. The result is that the slaughterhouses, engine room and associated plant are no longer (the flywheel is at Sunnybrae); the administration building (which did get listed) is a vandalised shell of its former self; and the sales ring, which had been provisionally entered in the State Heritage Register, was the victim of a recent fire.

The saga of the General Motors Holden site at Elizabeth is equally sorry. Again, there is no question of the significance of Holdens to the industrial and economic development of the state. Holden's first major factory established in 1919 (the former Repco building in King William Street) is no more; some of the Woodville plant still stands, but is not recognised on any statutory registers; and after three years of much heated debate the local heritage listing (I repeat local, not state) of Holden's Elizabeth plant, was reduced to what has been described as a 'miserable compromise' – the metal grill above the porch on the front of the administration building.

Recording

The detailed recording of a site is often held up as a way of 'keeping' sites for posterity, through photographic surveys, drawings and documenting of the site's history. But this does not, and cannot, I believe, ever replace the 'real thing'. Remember, objects that have been destroyed can never be replaced, that replicas are a poor substitute for the original.

There may be many photographs, engineers drawings and historical notes or even recordings of those who worked there, telling the story of the Humphrey Pumps at Cobdogla. However, there is nothing, absolutely nothing, than can replace the actual physical experience of witnessing this pump in action: the smells of the gas generator, the clicks and rattles of the valves and the whoosh and ground jarring whump of the water being moved through this unique pump, the only operational Humphrey Pump in the world.

Adaptive re-use

To me the only real answer is adaptive re-use. This applies not only to industrial sites, but also to other heritage sites.

But there are also some issues to be confronted here. Although the economic and physical viability of a site may be maintained or regained by re-using it, there is frequently a certain degree of compromise between retaining the important fabric of a site and its useability.

Again, with industrial sites, it tends to be the earlier places which have fared better in this way.

The 1859 Bridgewater Mill, built for J. Dunn & Co (and once described as 'the largest water-driven factory ever built in SA'), operated consistently until the 1890s using water and then steam power to grind locally grown wheat. A period of intermittent usage continued until the

early 1960s when the mill was abandoned and fell into decline. It was purchased by Petaluma in 1984 who renovated the building to house a restaurant, cellar door, and a cellaring and production facility.

Some 'new' uses perhaps don't really do the site justice!

The Hoffman Brick kiln on South Road at Torrensville, a significant and rare example of its type, is now only used as a covered area for the Brickworks Market.

There are several basic 'rules' applicable to adaptive re-use of industrial sites: assess first; retain as much original fabric and elements as possible and distinguish the old from the new.

Assess to determine important fabric

Initial assessment and documentation of the heritage values of a site must be made in order to inform decisions on the future of the site that will not duly conflict with those heritage values.

Retain

Wherever possible, original fabric should be kept and items associated with a site should be retained in their present location. The relationship between the elements of a site – the buildings and objects – is important in understanding how that site functioned.

Define

The old should be differentiated from the new – a distinction should clearly be made between new fabric introduced to a site and the original, significant fabric. This is a basic tenet of the Burra Charter, which is apparently not known to many who believe in the 'mummification' of a heritage site, wrapping it in the proverbial cotton wool as the only means of conserving its heritage value.

Unlike their domestic counterparts, industrial sites present their own set of issues and dilemmas ready to thwart their re-use for other purposes.

Purpose built

The general problem with most industrial sites is that they are purpose built. This is more of an problem with some places than others. It would be easier to re-use the Islington railway workshops, which are basically large open spaces surrounded by detailed masonry walling than something like the Adelaide Milling Company Mill at Port Adelaide where the internal space is more restricted by the existing low floor-to-ceiling heights, which makes re-use of that building difficult without gutting the interior completely.

And how do you 're-use' a modern power station, like the Playford power station at Port Augusta or a smelter such as that at Whyalla

...and what do you do with the killing and processing rooms of an abattoir, or the workings of a blast furnace?

Contamination

One particularly topical issue regarding re-use of industrial sites is that of contamination. The Whyalla Steelworks continues to pump its red dust across this town, Port Pirie has the highest rates of lead contamination in the state and of course, the 'mother' of them all, Maralinga, continues to make headlines, more than 45 years after the nuclear tests undertaken there.

The tests themselves obliterated much of the structures at Ground Zero, but subsequent clean up operations have erased what was left of the associated infrastructure for several kilometres around these sites. The impact of this, in such a remote place, might not mean much to us, but an artwork, painted by Jonathan Kumintjara Brown, does. Entitled 'Poisoned Country' the large canvas depicts a 'dot' painting almost completely 'smudged' out with red ochre, an image which not only reveals the loss of his connection to his land and culture but also depicts the physical destruction of the country itself.

Although adaptive re-use seems to be the best answer for the continued existence of industrial sites, more 'creative' 'outside-the-square' solutions need to be found for the more complicated sites. There are only so many museums, trendy apartments and art galleries that can be absorbed by the adaptive re-use of industrial sites.

4. Conclusion

It is apparent that the more 'picturesque' industrial heritage has survived, and that sites relating to mining or railways have also generally been treated with respect.

But we must try to retain what is left of our later and less appealing industrial heritage, to engender a greater public and corporate awareness and appreciation of the physical remains of our significant industrial achievements and to encourage the active re-use of such places. As suggested by Lucy Taksa when discussing initiatives to preserve Australia's industrial heritage in 1999:

To make the transition from the era of the steam train to the silicon chip historically meaningful, we need to improve public understanding of the cultural value of our manufacturing heritage.

Inclusion in registers is certainly crucial but should only be seen as a first step, one that is followed by the preservation of at least some of its innumerable material forms, together with the memories of its sacrificial lambs.

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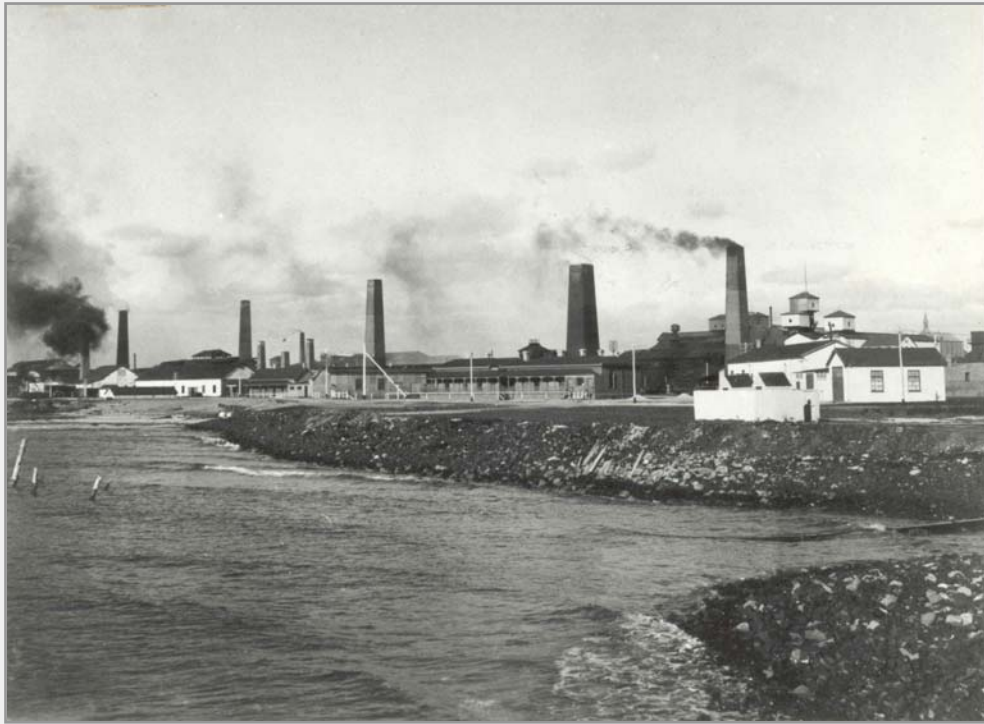














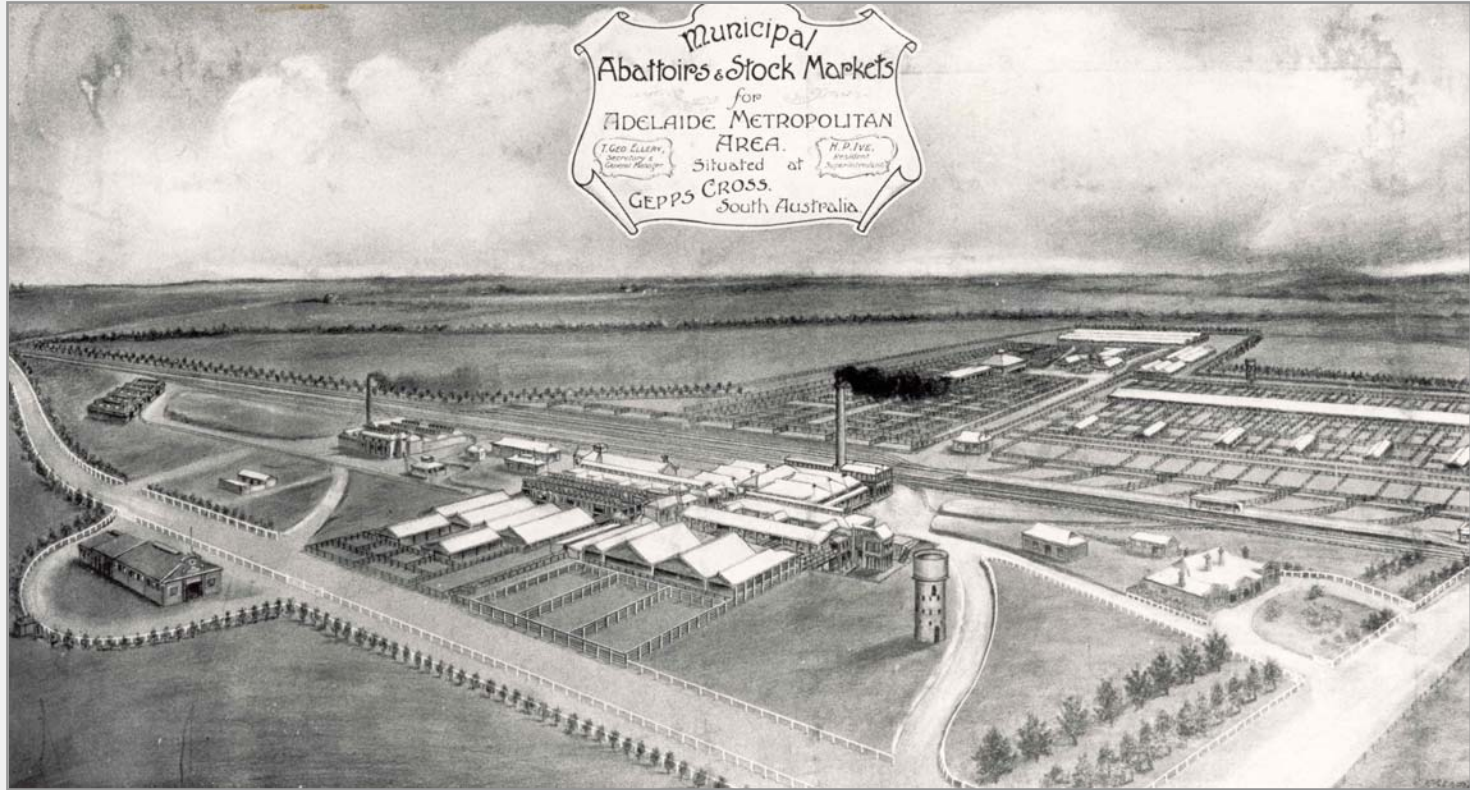




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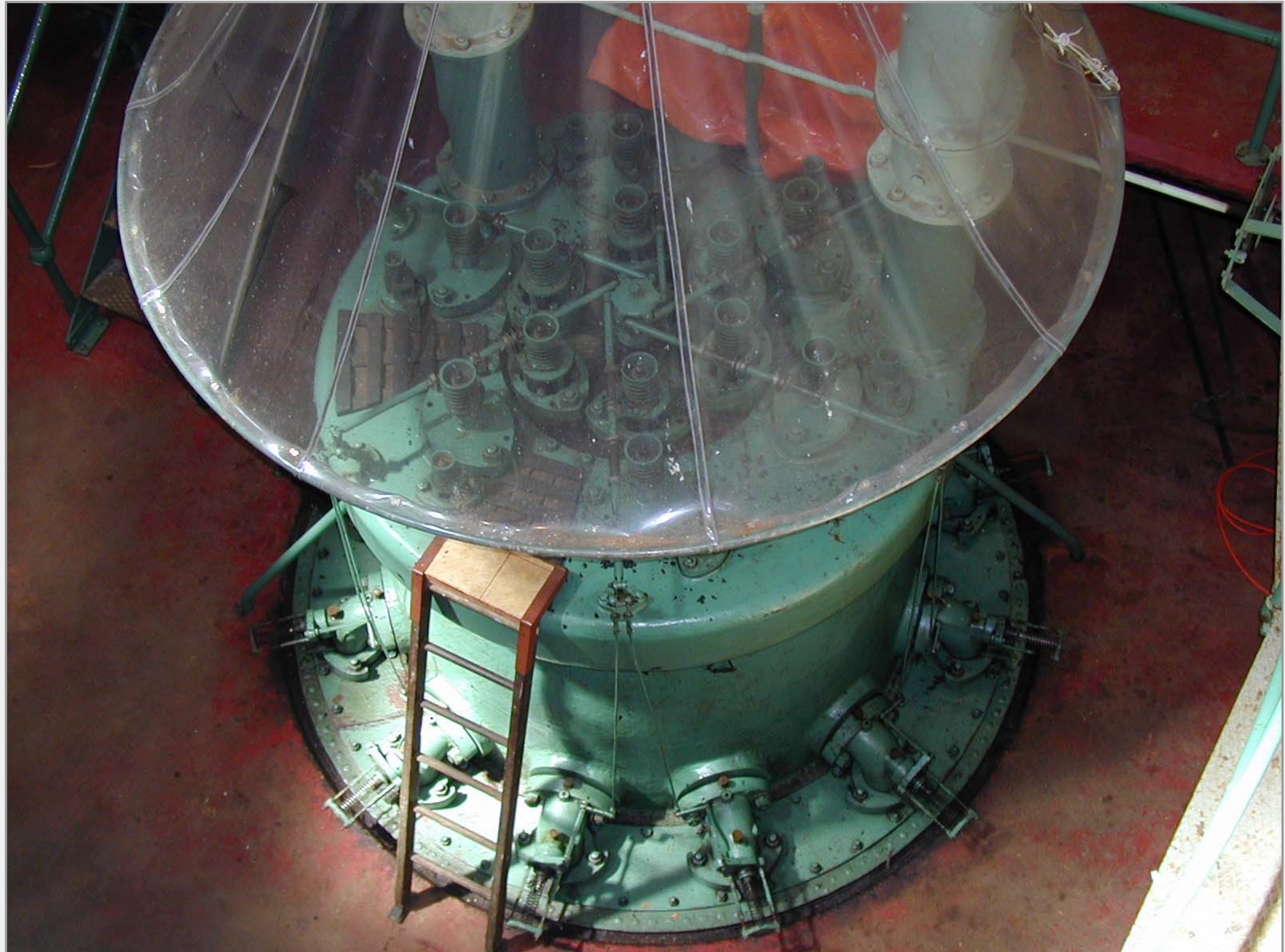




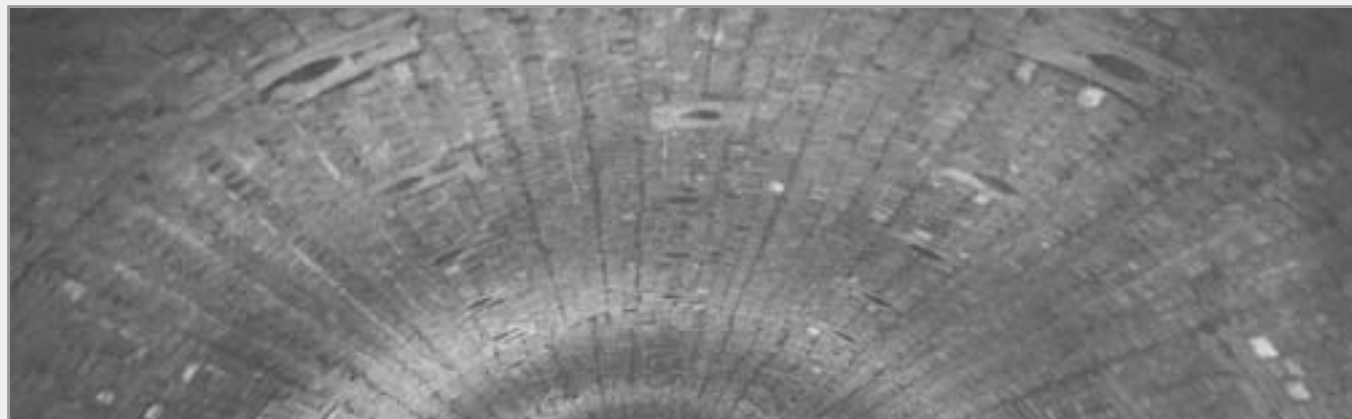








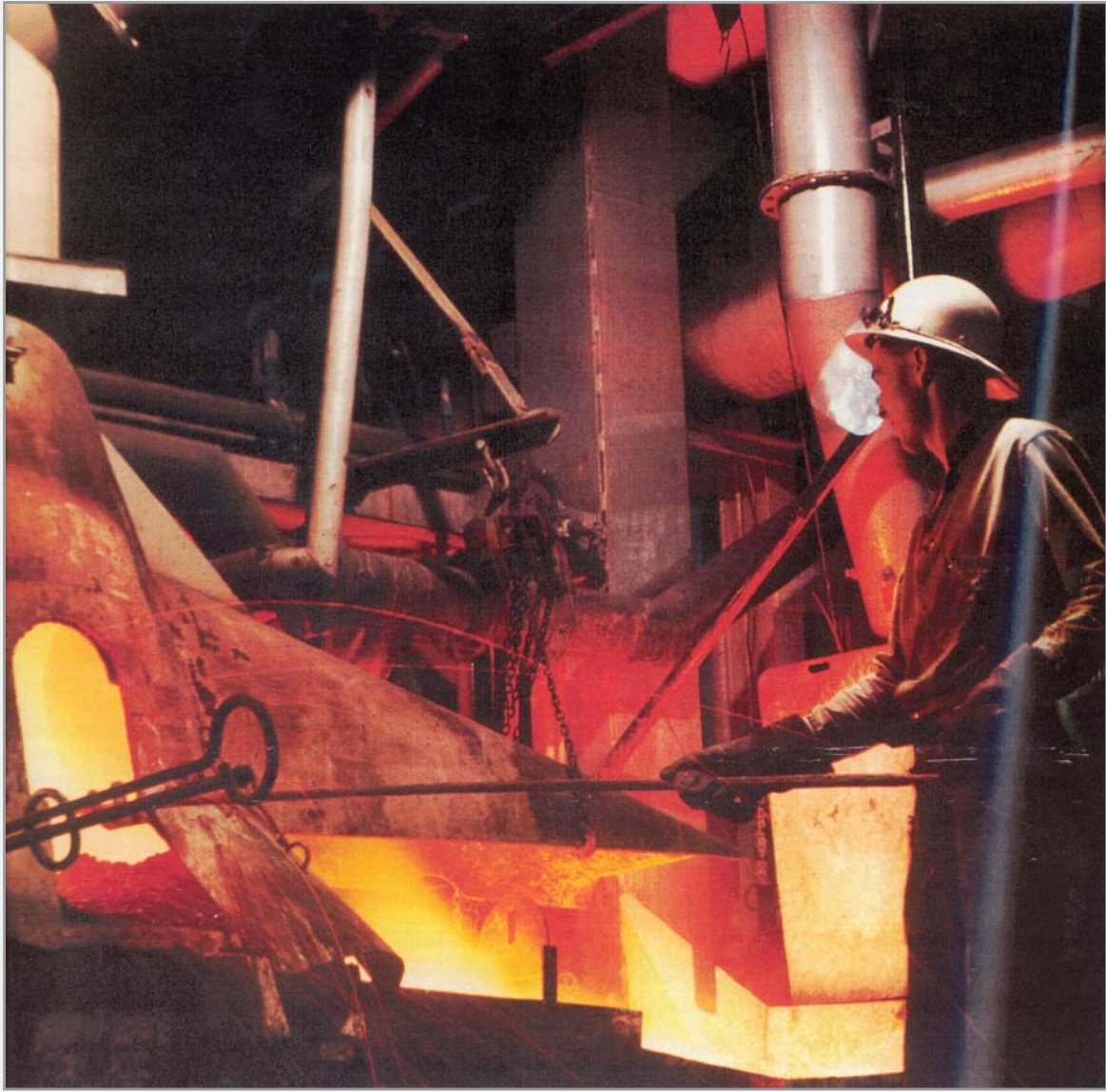
















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Lucy Taksa, 1991