

PANEL 3: BLIGHT REMOVAL, REMEDIATION
& ECONOMICS

Closing the Loop

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MONTEREY BAY
Extraordinary Opportunity



(Released by Kirk Anderson, Cartoonist)



- Recover
- Reuse
- Redesign





The Past

Ft. Ord Panelized Deconstruction



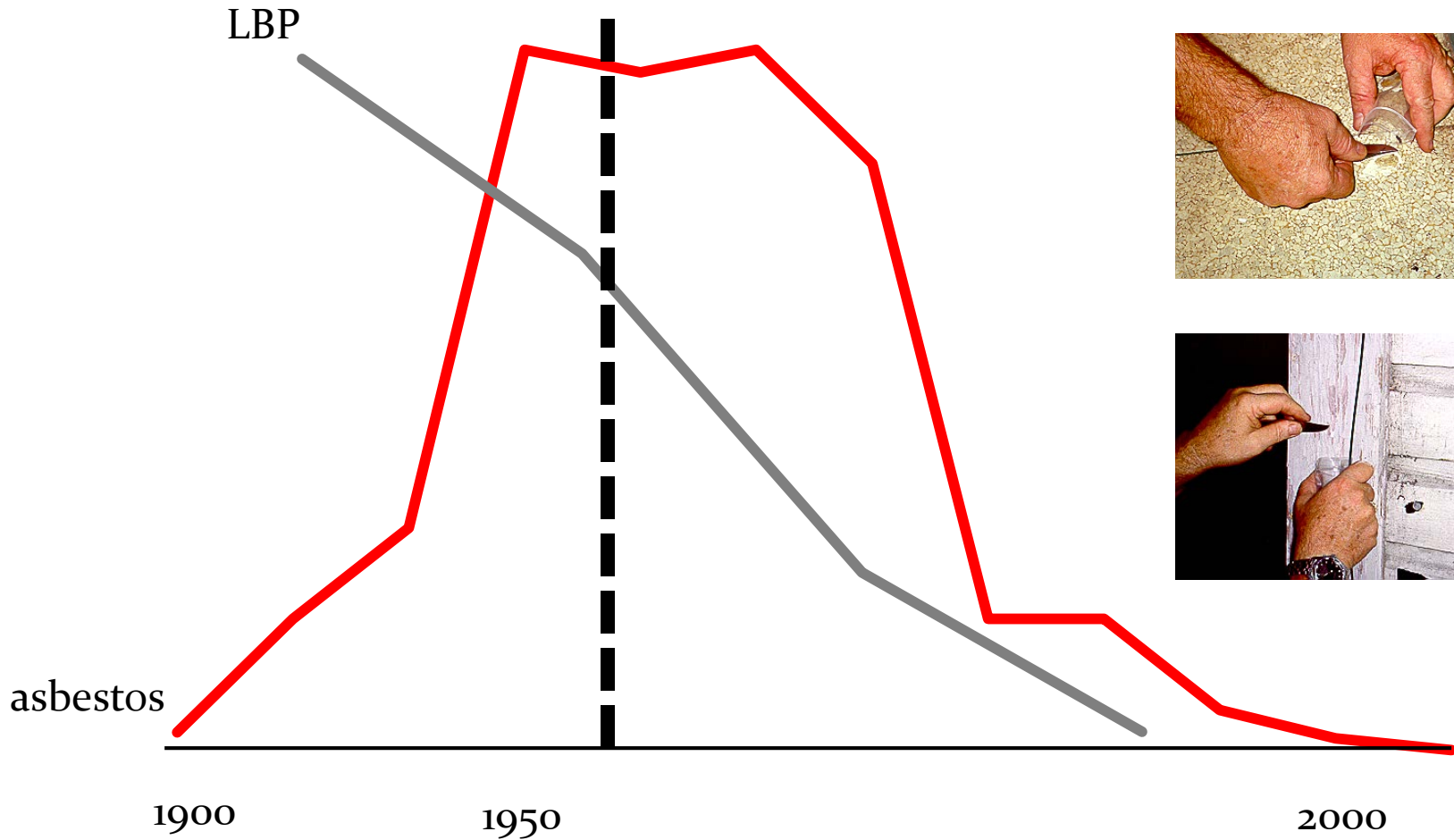
Some Current Conditions



Reuse Takes Work



LBP & asbestos USA



Impacts of Building / Materials

- 3.4 billion tons of materials US economy 2000
 - 5% from renewable sources
- Construction materials production 11% global CO₂
- Cement 7% of global GHG

Building Chemical Risks

Substance	Impacts	Product(s)
Bisphenol A	R, A	plastics, adhesives, paints
Dibutylphthalate	R, TA	paints, adhesives
Formaldehyde	C	adhesives, cement
Pentachlorophenol	T, TA, C	biocides
Vinyl chloride	C	plastics

Annual C&D waste USA







Raw materials



Products

Rucksack Factors

- Wood 1.2
- Glass 2
- Plastics 2 - 7
- **Cement** 3
- **Steel** 7
- Paper 15
- Aluminum 85





The Present

Reasons for Building Demolition

- **Unsuitability for use**
- **Unable to economically adapt building**
- Land-use redevelopment
- Economic disinvestment (abandonment)
- **Buildings designed for short-life**
- Other – aesthetics
- Only 40% of demolitions from physical condition

















The Future

Un

Sustainable Building

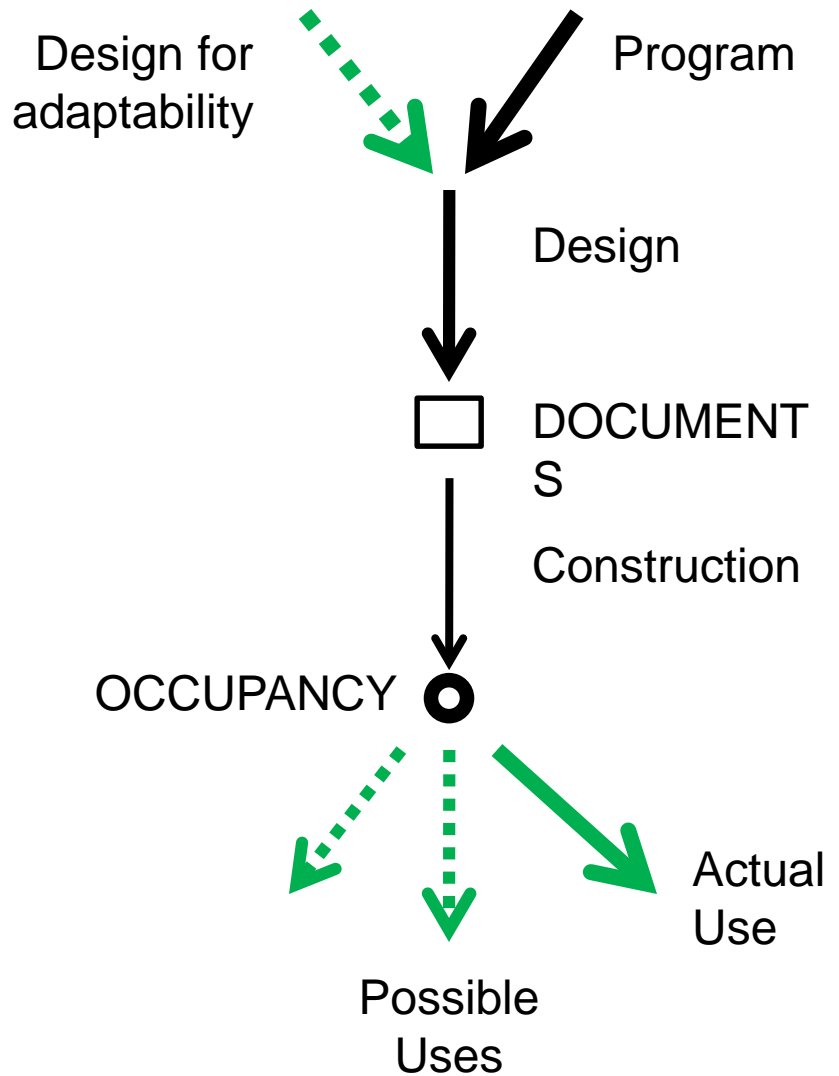
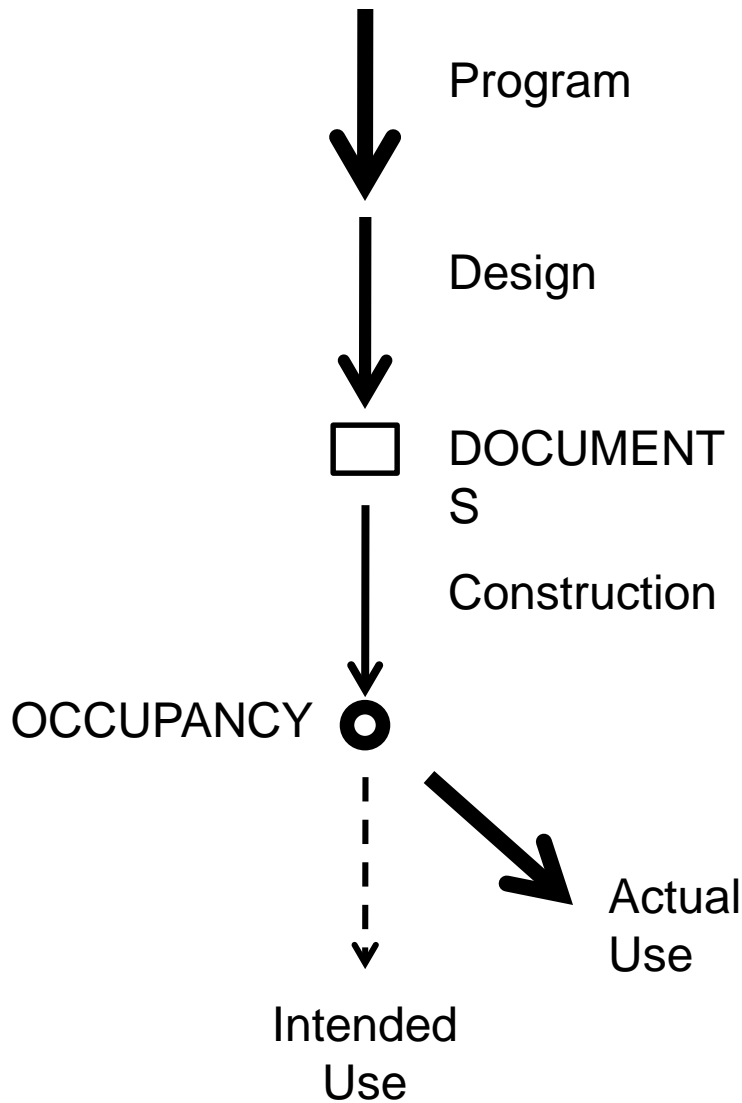
Pollutes air	—————→	Cleans air
Pollutes water	—————→	Cleans water
Wastes rainwater	—————→	Stores rainwater
Dumps waste unused	—————→	Consumes wastes
Destroys wildlife habitat	—————→	Provides wildlife habitat
Imports energy	—————→	Exports energy
Requires fossil-fuel transport	—————→	Allows human-powered transport
Excludes daylight	—————→	Uses daylight
Uses mechanical heat / cool	—————→	Uses passive heat / cool
Pollutes indoor air	—————→	Creates pure indoor air
Built of new materials	—————→	Built of reused / recycled materials
Cannot be recycled	—————→	Can be recycled
Is ugly	—————→	Is beautiful

Adapted from Malcolm Wells' Regenerative Design Checklist

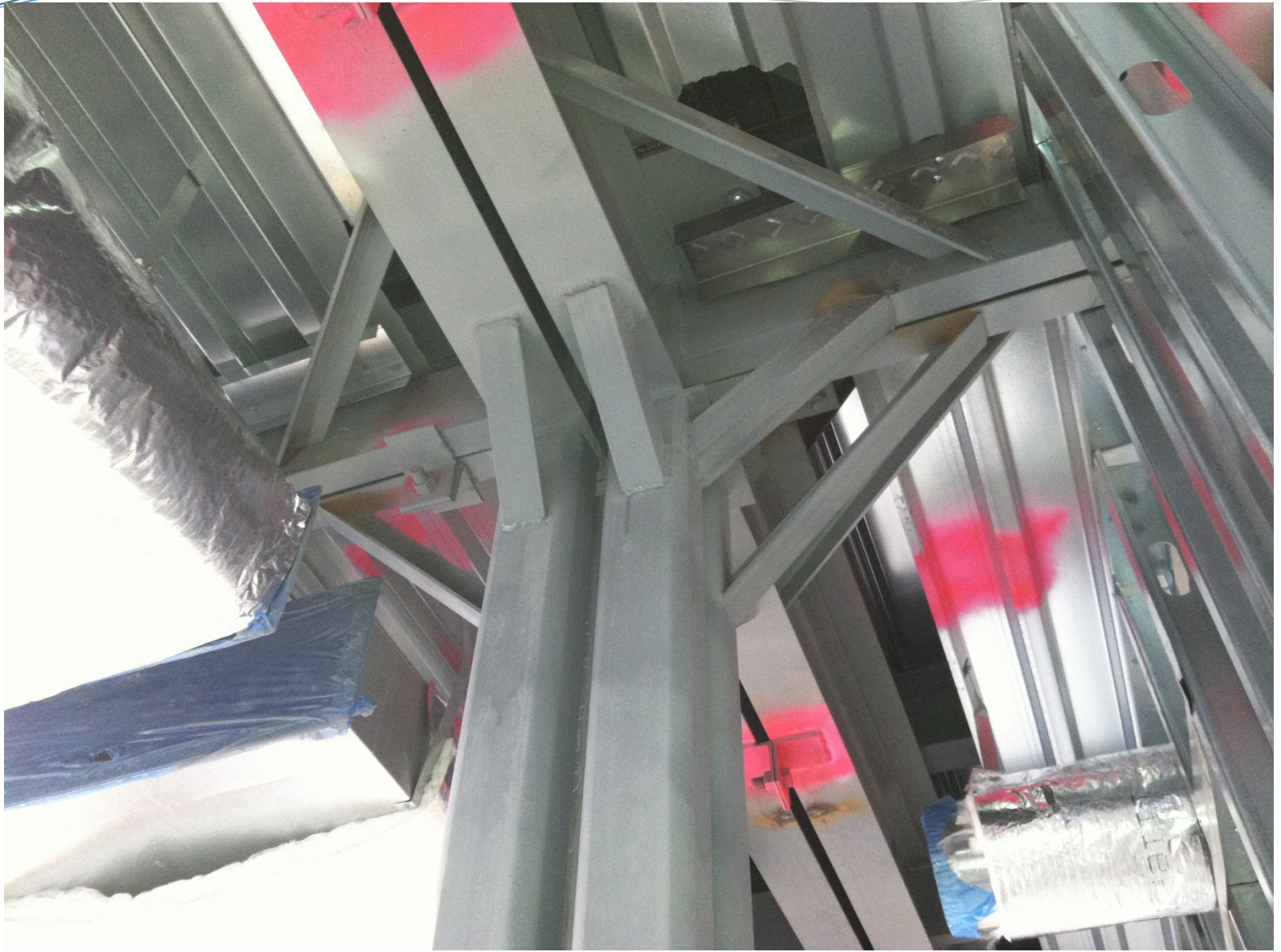


Design

DfAdaptability







Nothing endures but change

Heraclitus (540 BC - 480 BC)



Parikia Castle in Paros built in the 1200's entirely with material from the nearby ancient temple of Hera (Saradi, 1997).