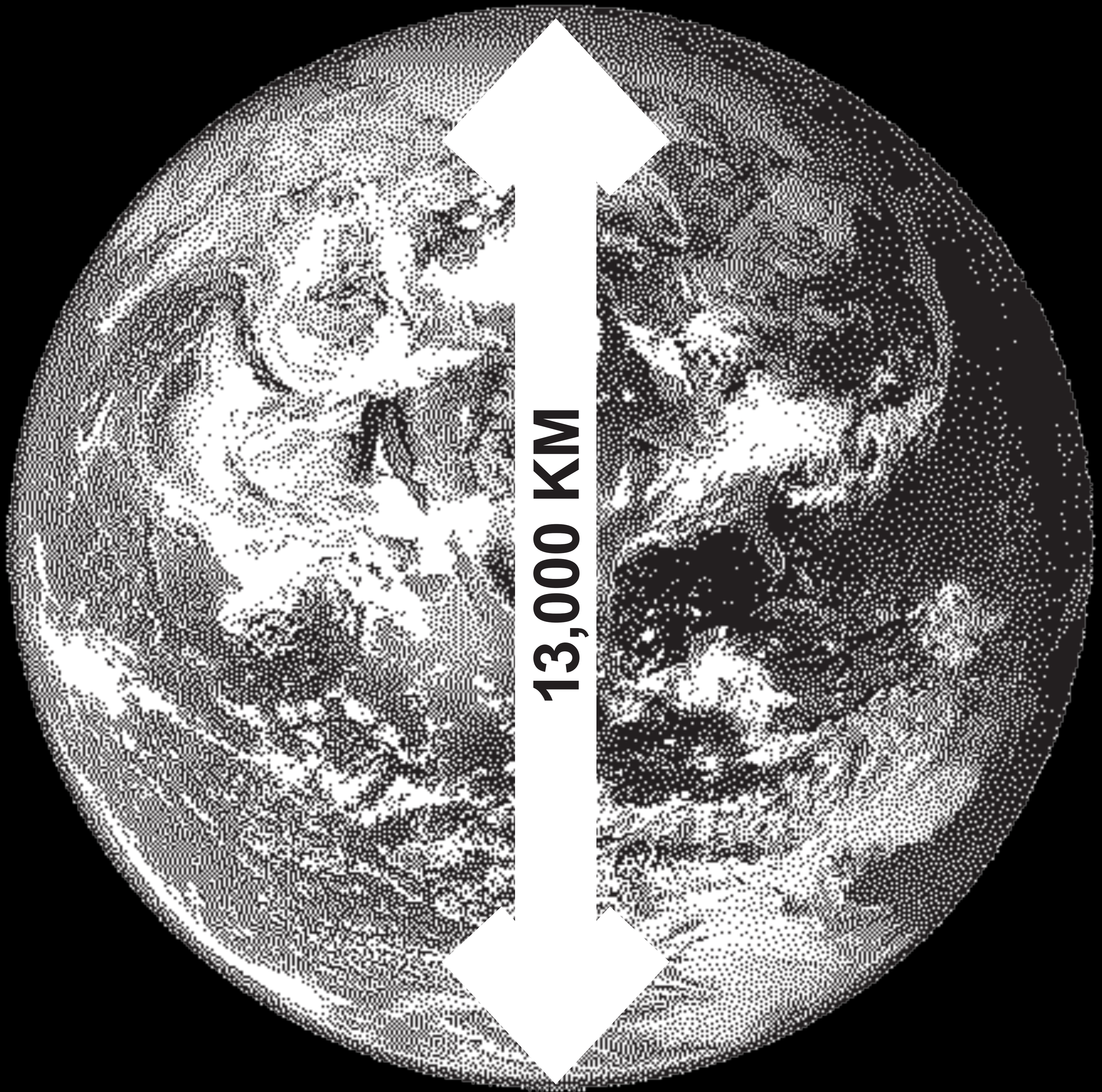


PLANETARY BOUNDARIES



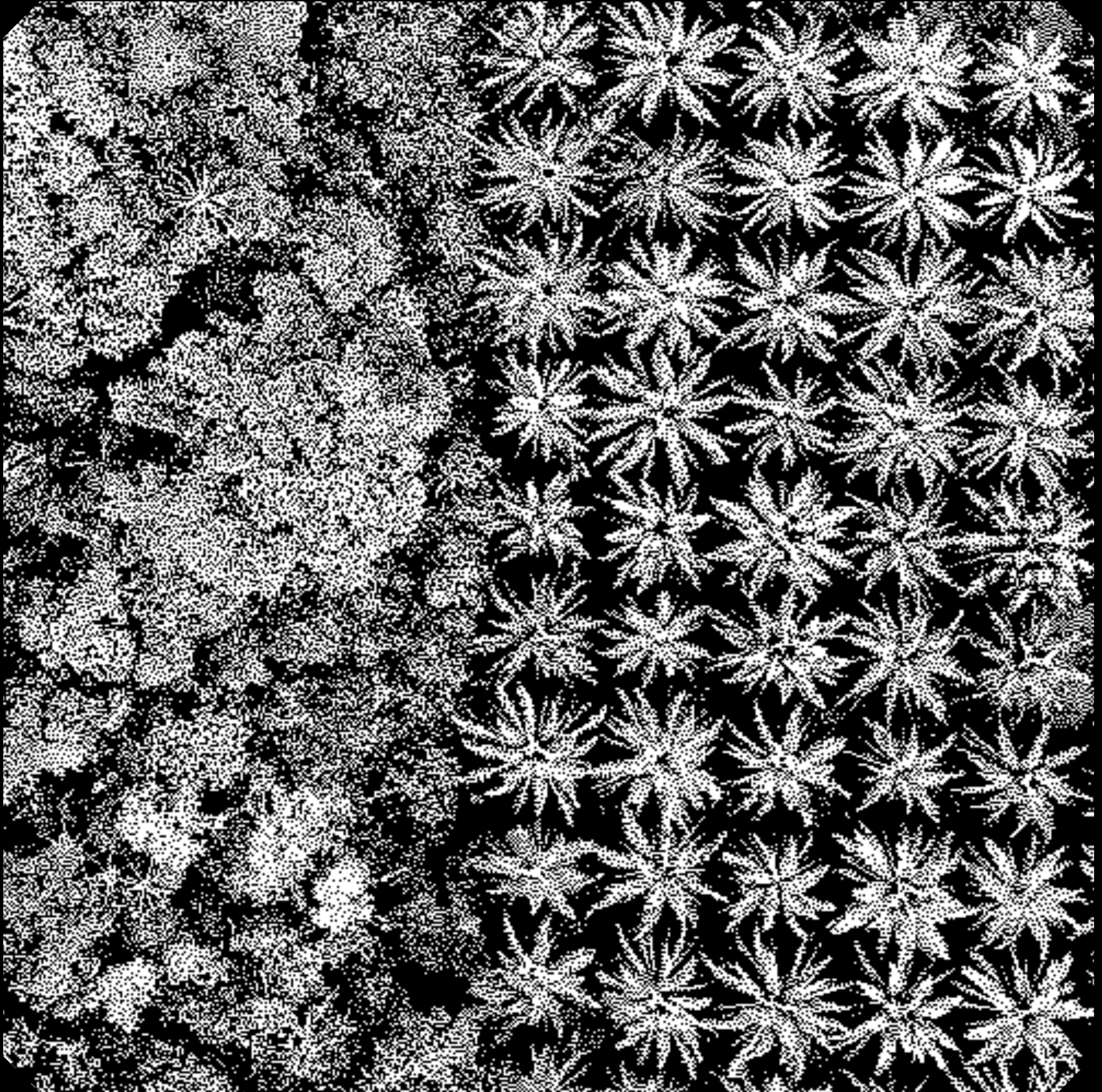
A SET OF PLANETARY BOUNDARIES WITHIN WHICH HUMANITY CAN CONTINUE TO DEVELOP AND THRIVE FOR GENERATIONS TO COME.

JEVONS PARADOX



**OPTIMISING OR IMPROVING THE ENERGY
EFFICIENCY OF A COMMODITY
ALSO TENDS TO INCREASE ITS OVERALL
RATE OF CONSUMPTION.**

PLANTATION



**A SIMPLIFIED AND IMPOVERISHED BIOLOGICAL
MODEL DEVELOPED TO PUT THE PLANET
AND ITS RESOURCES TO INTENSIVE WORK.**

ZOMBIE ENERGY



**MODERN SOCIETY'S STOCK OF MACHINES
IS ANIMATED BY LONG-DEAD INORGANIC
ENERGY (IN THE FORM OF COAL, OIL OR GAS).
FOSSIL (DEAD) ENERGY THREATENS
TO DESTROY THE BIOSPHERE.**

ECOSYSTEM SERVICES



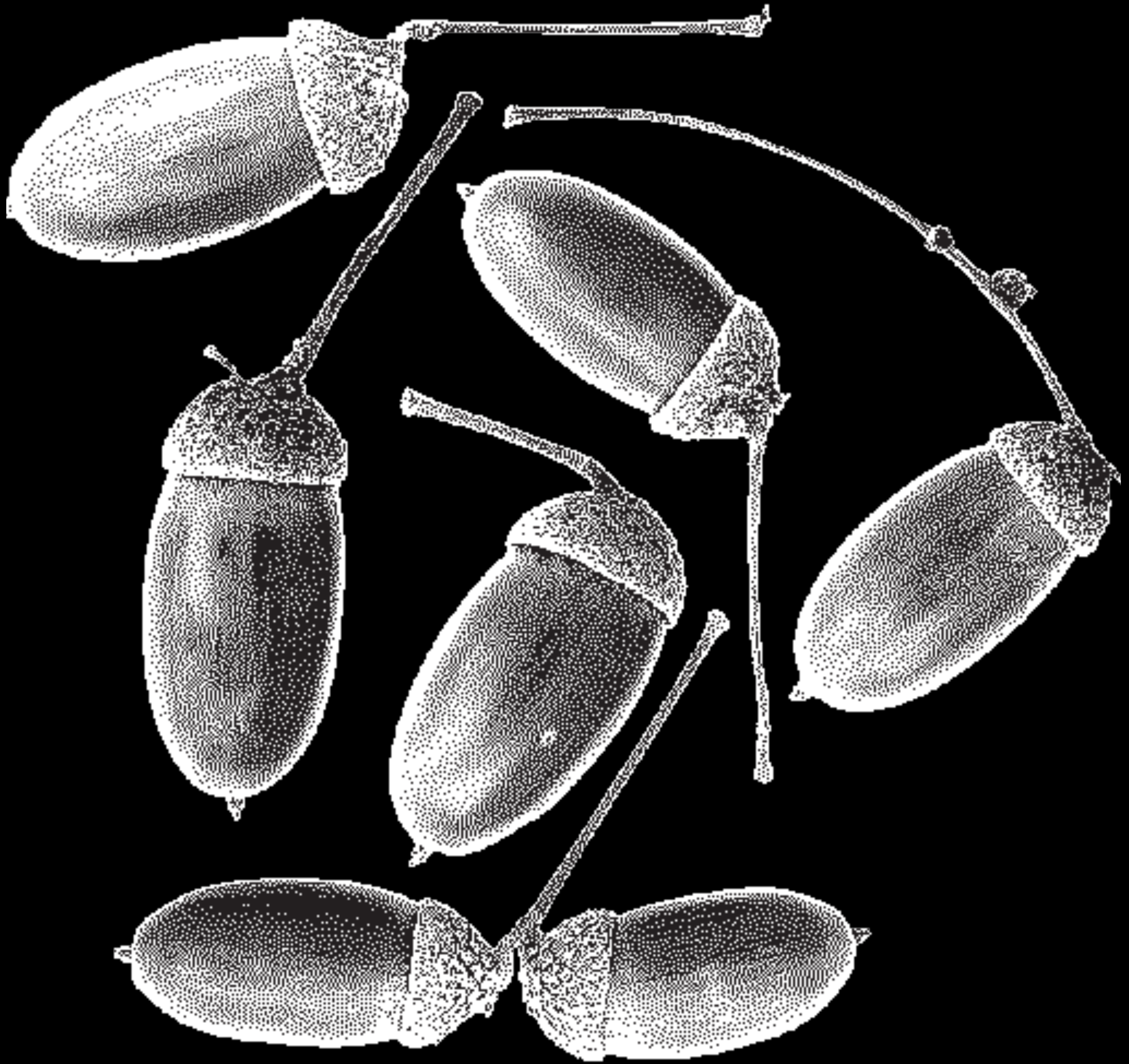
**ECOSYSTEMS PROVIDE MANY SO-CALLED
ECOSYSTEM SERVICES. SOME ARE ESSENTIAL
FOR LIFE (SUCH AS POLLINATION) AND
ARE THEN CONSIDERED COMMON GOODS.**

GLOBAL ARTIFICIALITY



THE ARTIFICIALIZATION THAT RESULTS FROM HUMAN ACTIVITY IS OMNIPRESENT AND GLOBAL (NUCLEAR ISOTOPES, COMPOSITION OF THE ATMOSPHERE, CELL STRUCTURE, PLANTATIONS, ETC.).

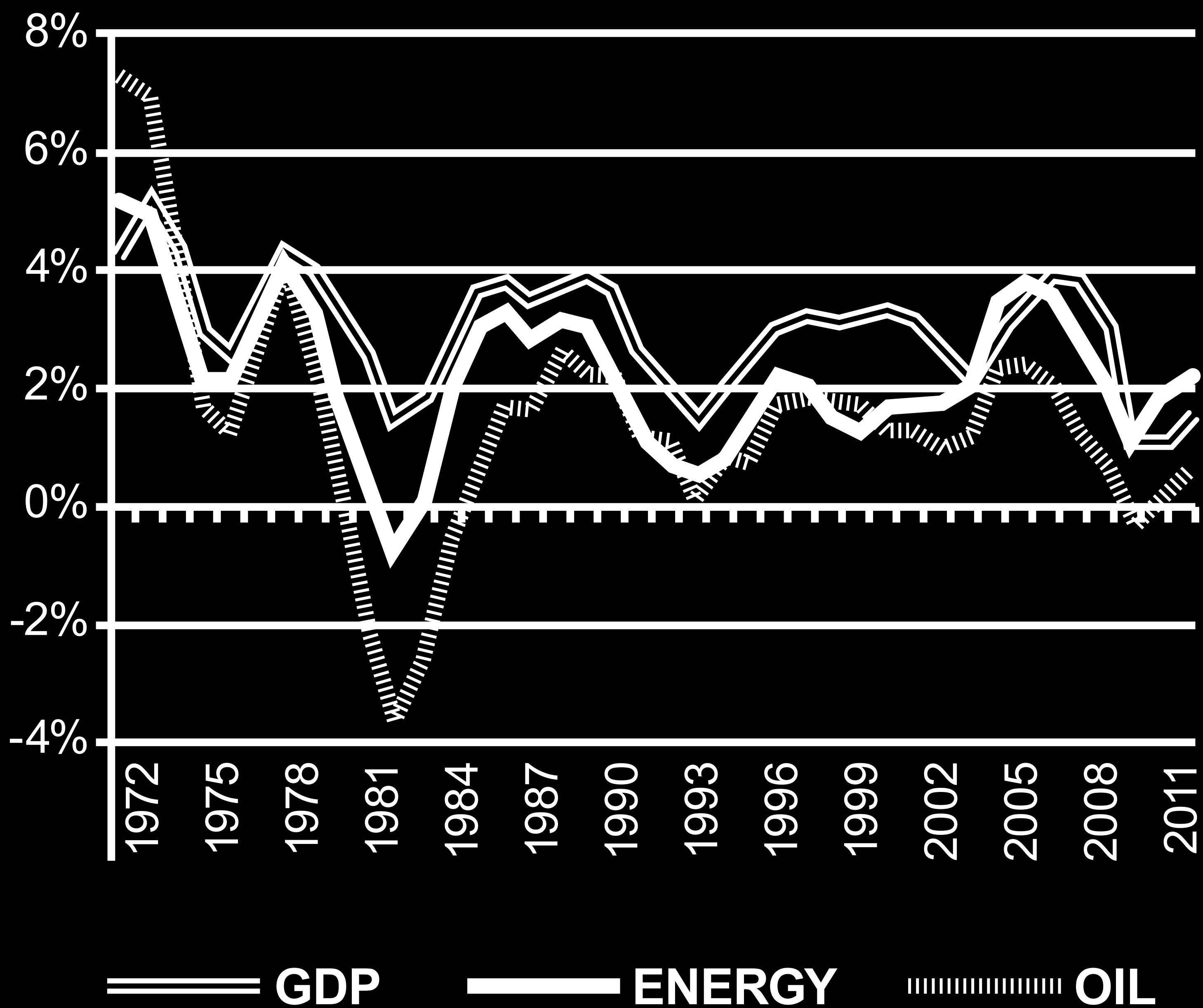
THE SEVENTH GENERATION PRINCIPLE



**ACCORDING TO IROQUOIS WISDOM,
IN EVERY DELIBERATION, BE IT PERSONAL
OR COLLECTIVE, WE MUST CONSIDER
HOW IT WILL AFFECT OUR DESCENDANTS
SEVEN GENERATIONS INTO THE FUTURE.**

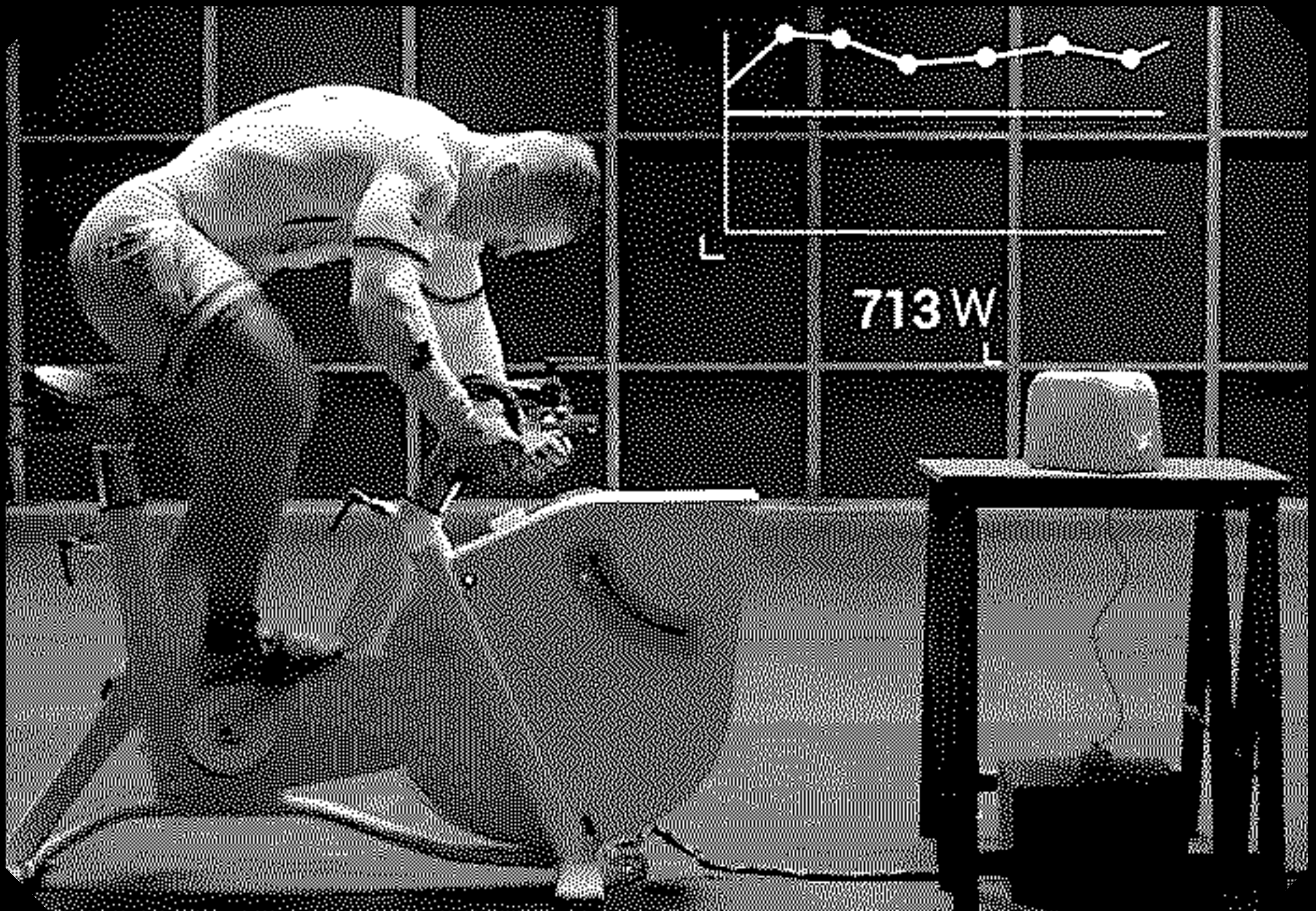
ENVIRONMENT, ENERGY, ECONOMY LINK

WORLD GROWTH IN GDP, ENERGY AND OIL



**CONTEMPORARY EXPONENTIAL
ECONOMIC ACTIVITY IS DIRECTLY TIED
TO ENERGY CONSUMPTION,
WHICH IN TURN IS DIRECTLY CORRELATED
TO ENVIRONMENTAL CHANGE.**

ENERGY SLAVE



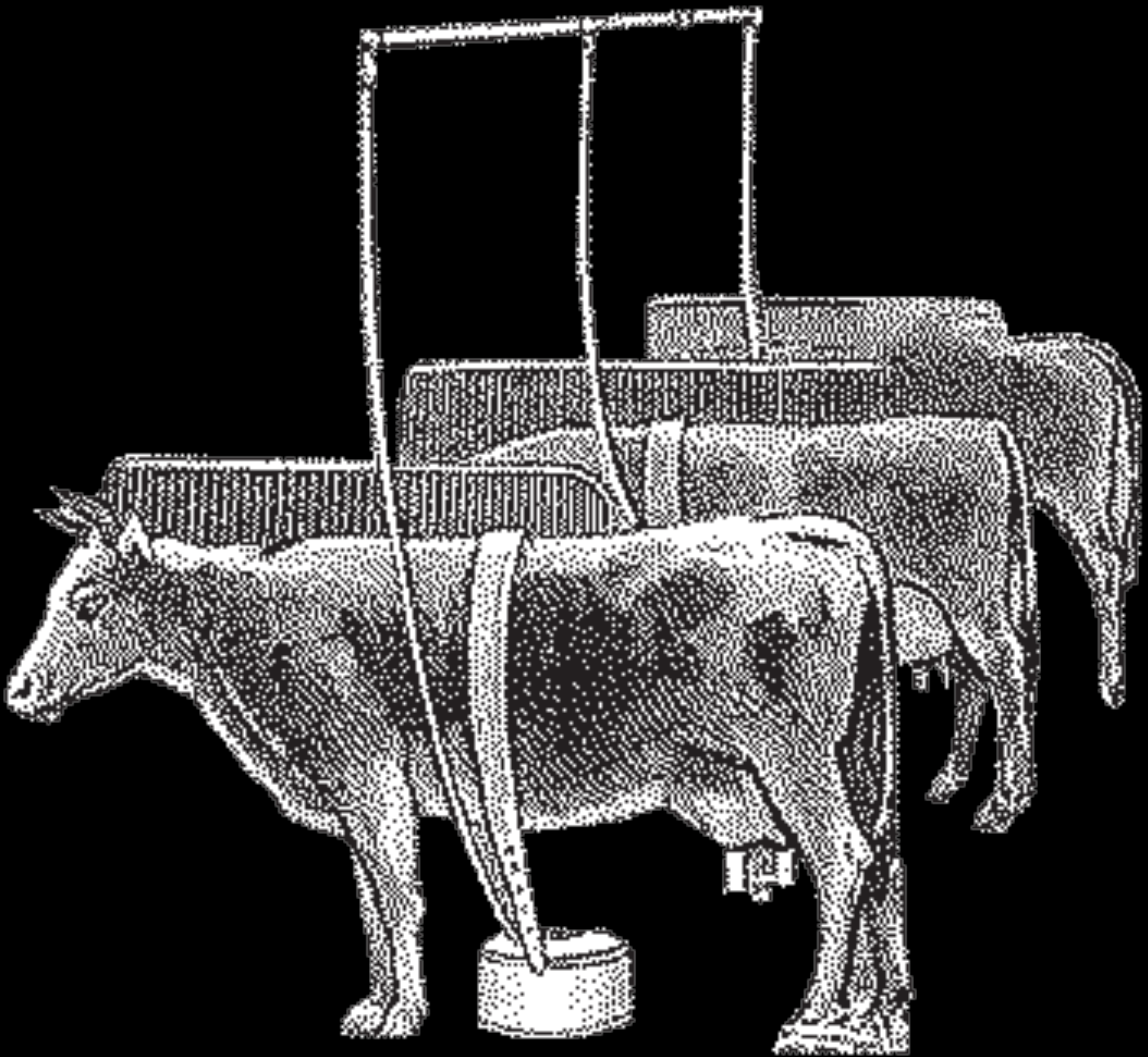
AN ENERGY MEASURE ALLOWING TO COMPARE THE ENERGY CONSUMPTION REQUIRED FOR THE OPERATION OF A MACHINE OR INFRASTRUCTURE, TO THE PHYSICAL WORKING CAPACITY OF AN ADULT.

INTERSPECIES COMMONS



**RESOURCES SHARED, MANAGED,
AND MAINTAINED COLLECTIVELY BY A HUMAN
AND NON-HUMAN COMMUNITY.**

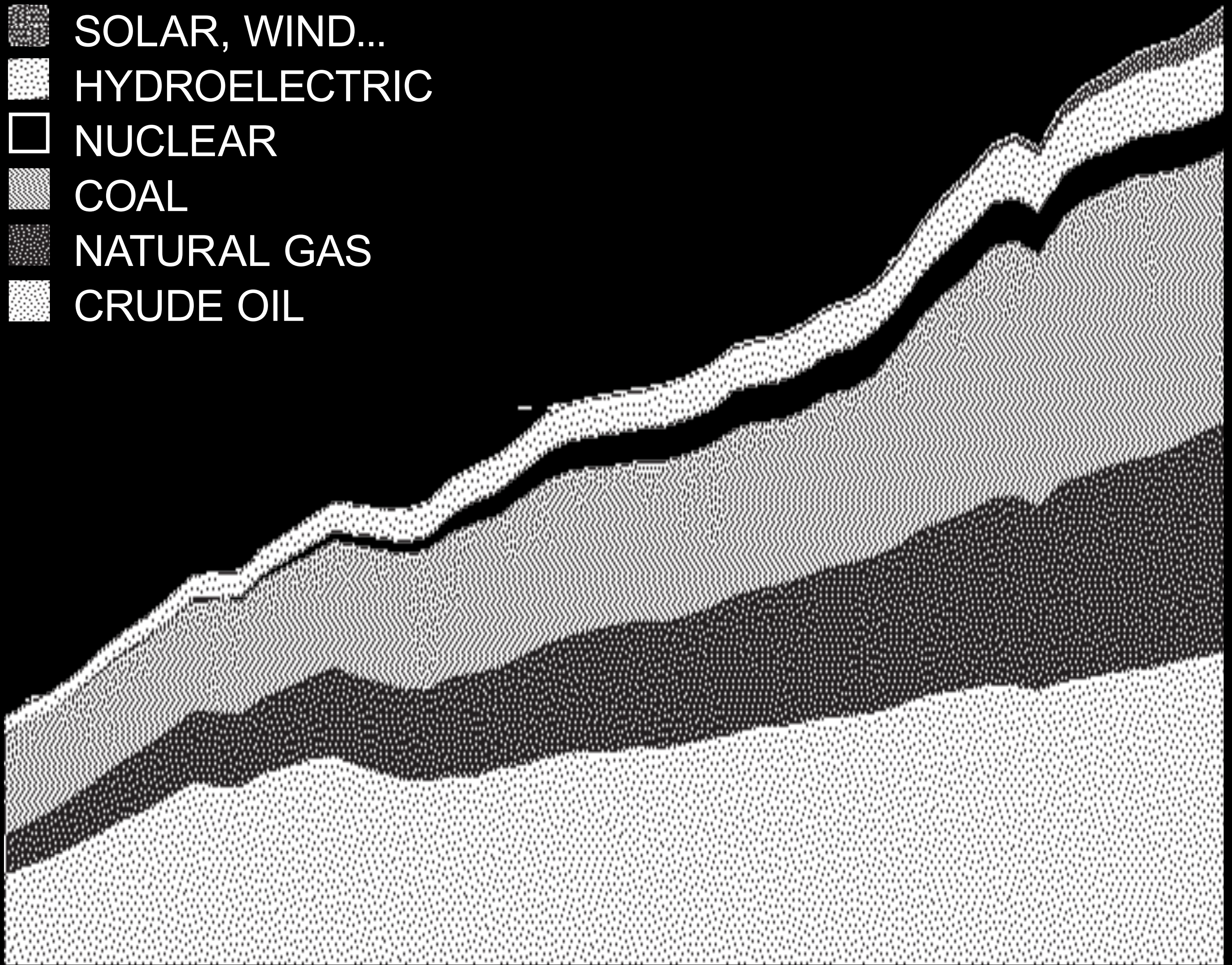
INTER-SPECIES WEALTH TRANSFER



POPULATION GROWTH AND RISING LIVING STANDARDS IN INDUSTRIALISED SOCIETIES COME AT THE EXPENSE OF BIODIVERSITY AND THE QUALITY OF LIFE OF OTHER SPECIES.

THERE HAS NEVER BEEN AN ENERGY TRANSITION

- SOLAR, WIND...
- HYDROELECTRIC
- NUCLEAR
- COAL
- NATURAL GAS
- CRUDE OIL



1965

**GLOBAL PRIMARY ENERGY CONSUMPTION
(MILLION TONNES OIL EQUIVALENT)**

2017

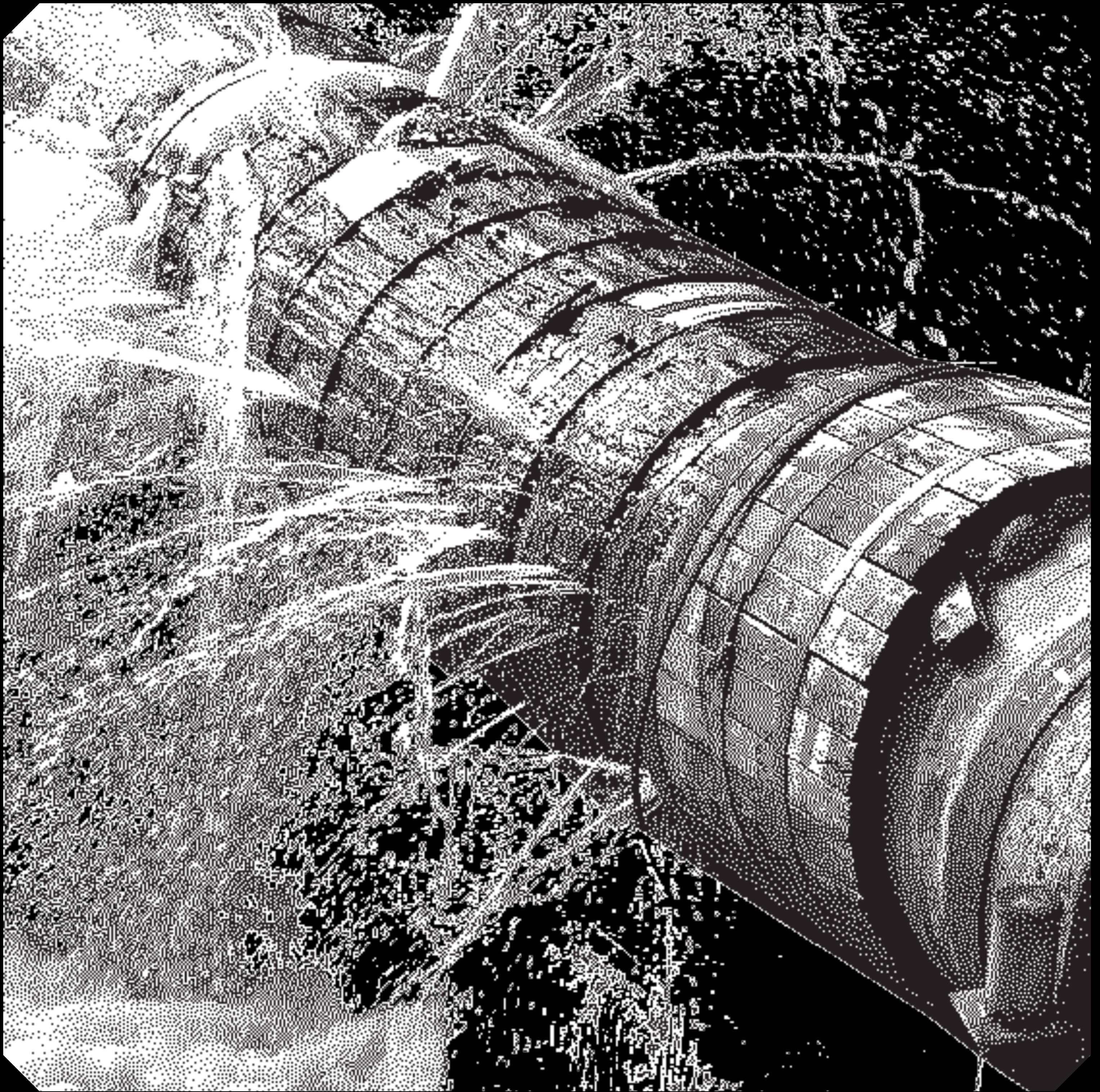
HISTORICAL CHANGES IN ENERGY RESOURCES HAVE ESSENTIALLY ALWAYS BEEN ENERGY ADDITIONS, NOT TRANSITIONS.

TRUE COST MARKET



**AN ECONOMY THAT INCLUDES THE COST
OF NEGATIVE EXTERNALITIES
ASSOCIATED WITH GOODS AND SERVICES.**

BROKEN WORLD THINKING



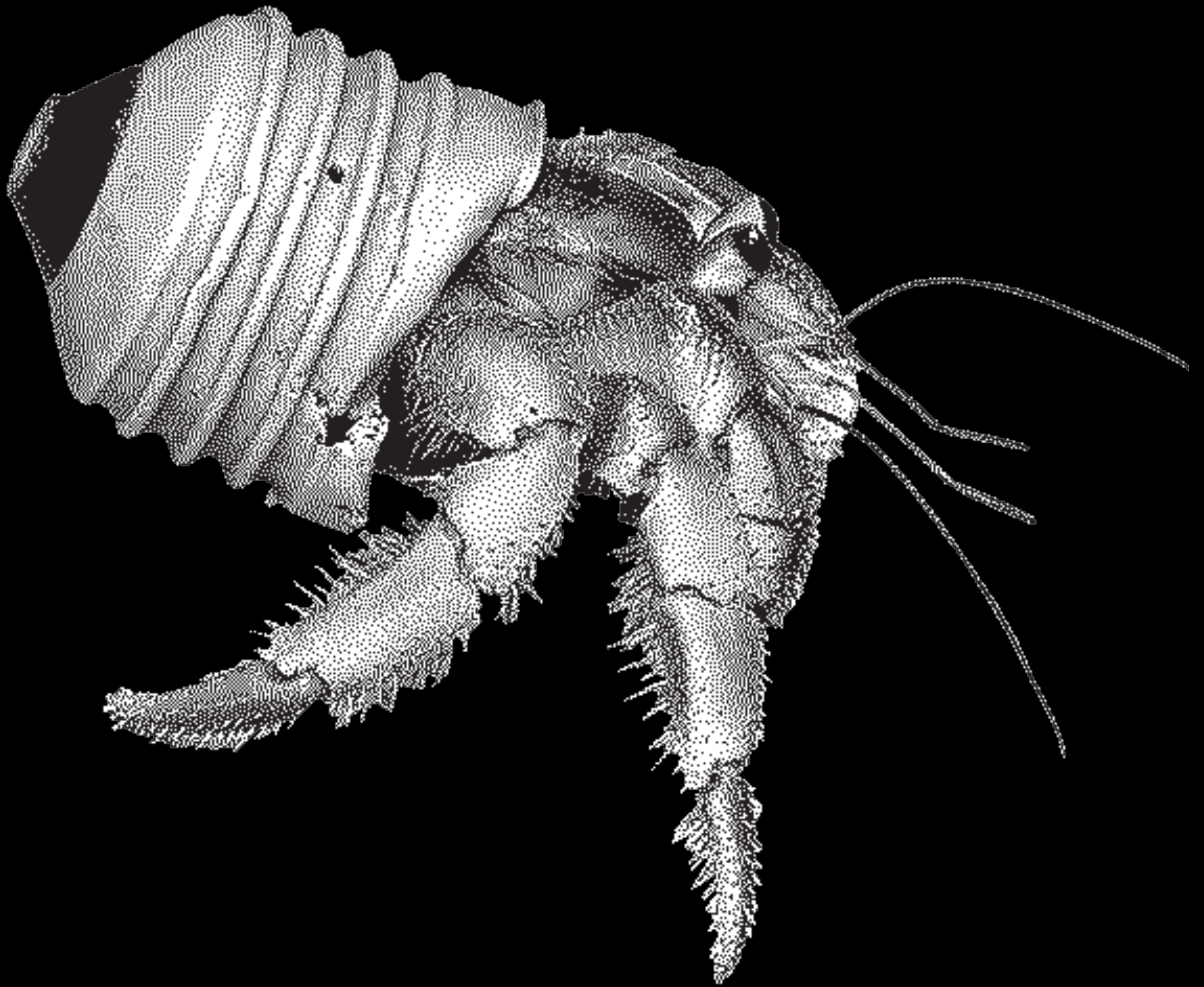
**INVITES US TO THINK ABOUT THE WORLD
FALLING APART AS AN OPPORTUNITY TO COME
INTO RELATIONSHIPS OF CARE, REPAIR
MAINTENANCE (RATHER THAN MERELY
NOVELTY AND INNOVATION).**

COLLAPSE INFORMATICS



**NOW THAT COMPUTING IS AS CHEAP
AND ACCESSIBLE AS EVER, IT'S TIME TO
STUDY, DESIGN AND DEVELOP SYSTEMS
IN THE ABUNDANT PRESENT
FOR USE IN A FUTURE OF SCARCITY.**

DEFUTURING



**PRACTICES OF DESIGN, TECHNOLOGY,
RESEARCH AND INDUSTRY THAT DEPRIVE US
OF CERTAIN FUTURES, INCLUDING DESTROYING
THE POSSIBILITY OF A HABITABLE FUTURE.**

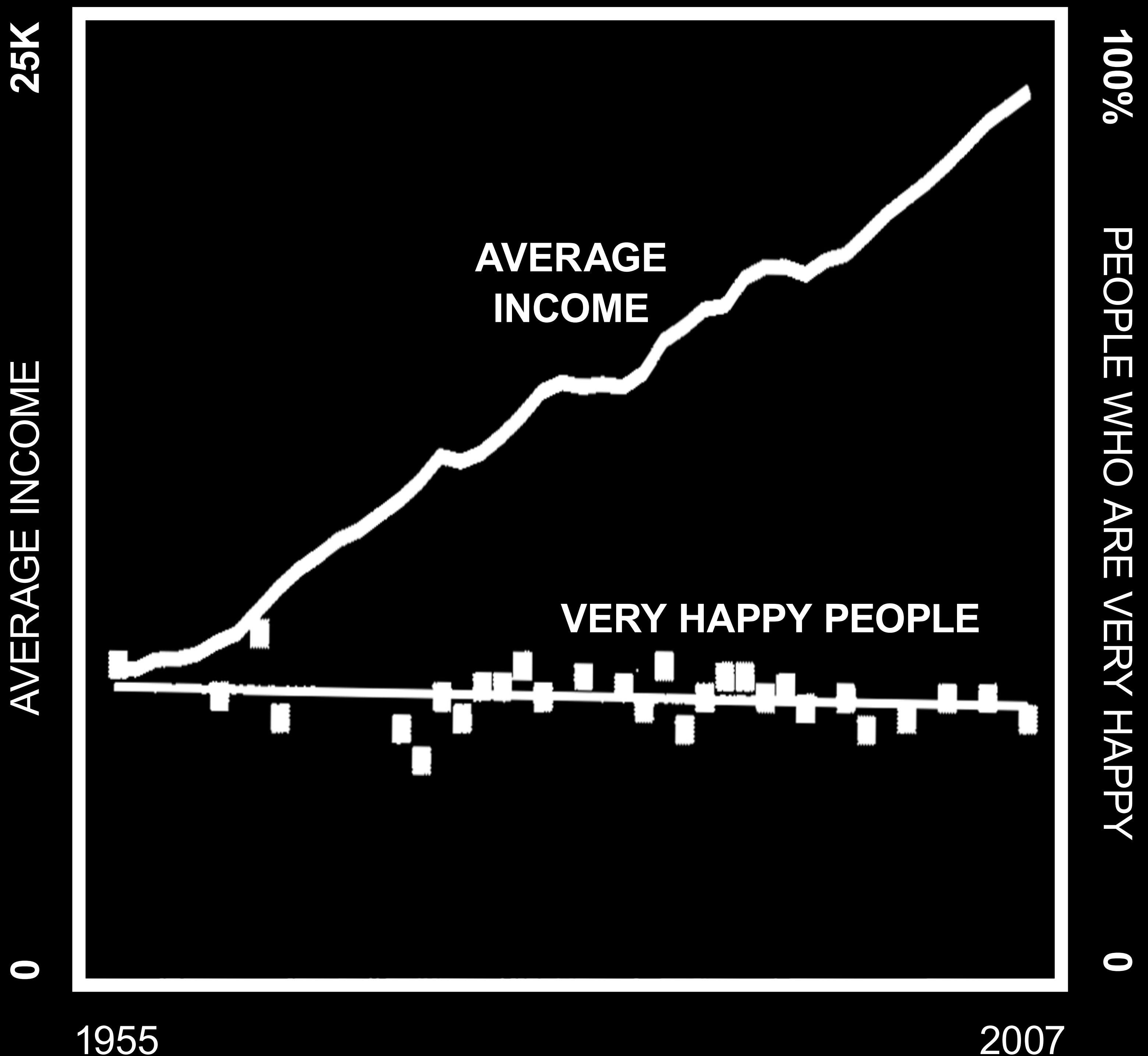
NEGATECHNOLOGY



**THERE ARE MANY SITUATIONS, WHERE LESS
TECHNOLOGY AND COMPLEXITY, NOT MORE,
MAY BE DESIRABLE FOR A SYSTEM.**

PROSPERITY WITHOUT GROWTH

AVERAGE INCOME & HAPPINESS, USA



PROSPERITY TRANSCENDS MATERIAL CONCERNS. BEYOND A CERTAIN THRESHOLD, GROWTH NO LONGER CORRELATES WITH AN INCREASE IN WELL-BEING.

NEGATIVE COMMONS



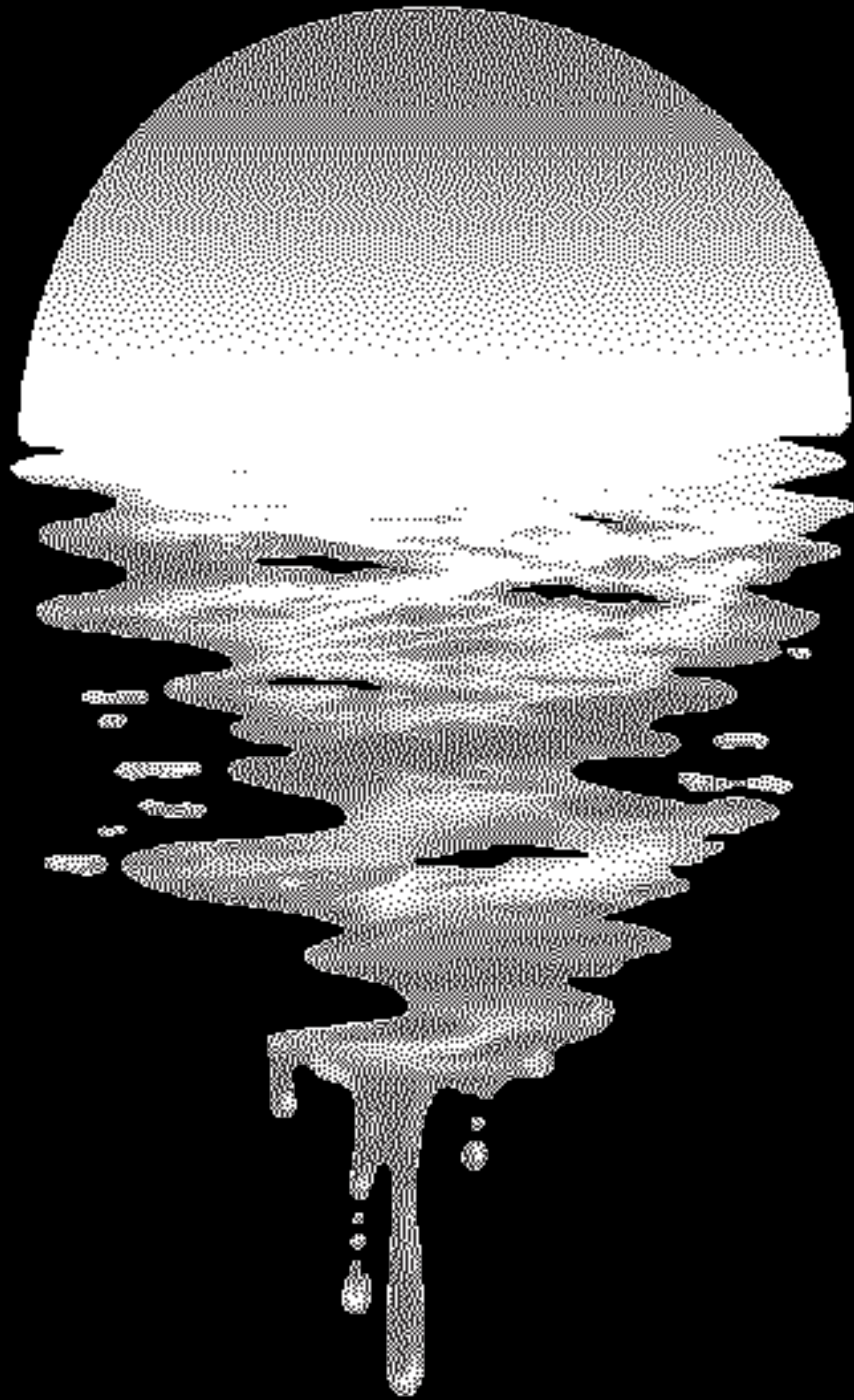
**A SET OF «NEGATIVE» ASSETS
WE COLLECTIVELY INHERIT THAT NEED TO
BE TAKEN CARE OF, BUT ALSO POTENTIALLY
PREVENTED FROM BEING PRODUCED
IN THE FIRST PLACE.**

CAPITALISM ≠ SOCIAL PROGRESS



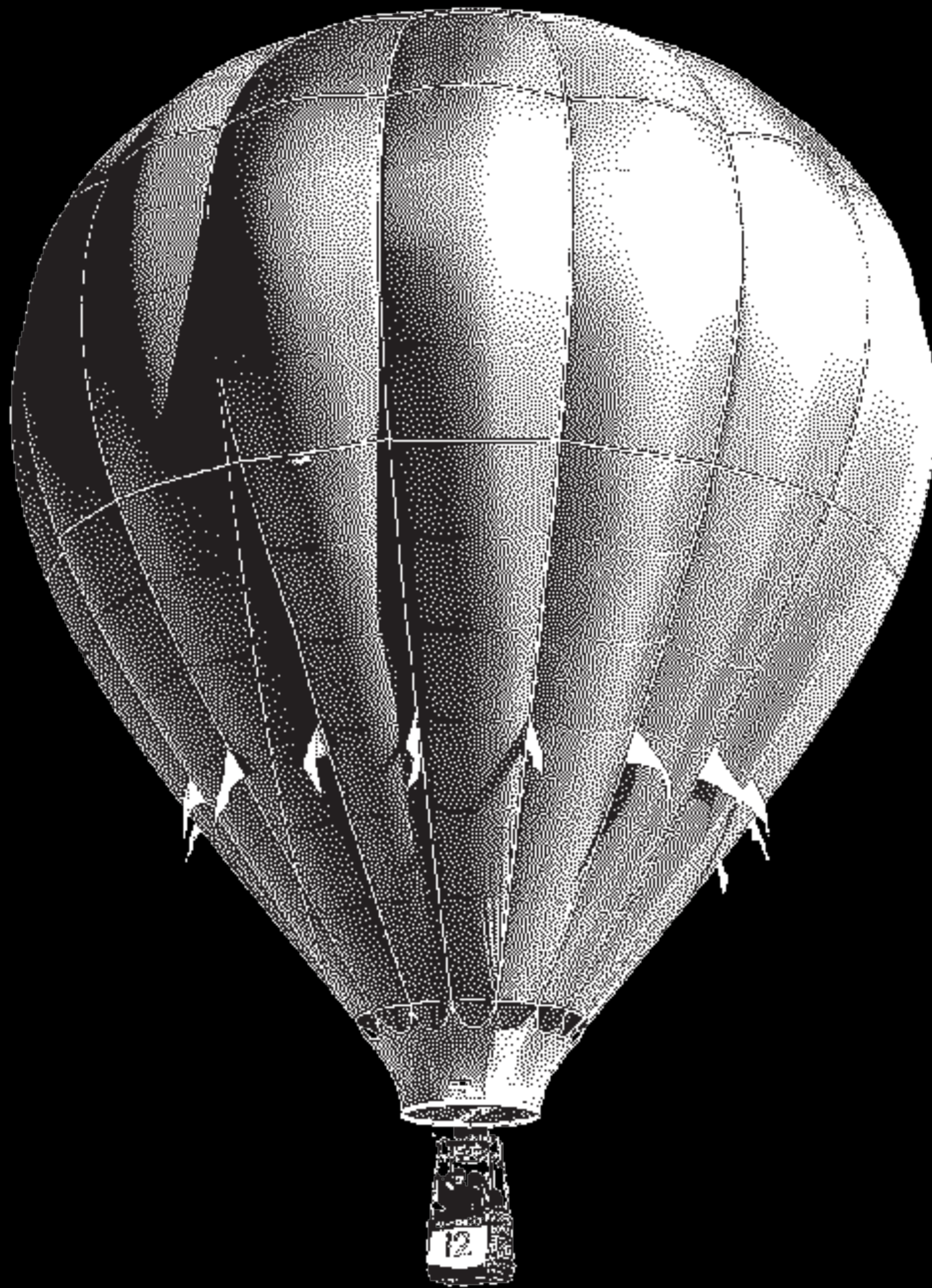
**IT'S NOT THANKS TO CAPITALISM
BUT TO PROGRESSIVE POLITICS THAT WE ARE
LIVING LONGER. HISTORY SHOWS THAT
IN THE ABSENCE OF PROGRESSIVE FORCES,
GROWTH HAS OFTEN WORKED AGAINST
SOCIAL PROGRESS, NOT FOR IT.**

ANCIENT SUNLIGHT



**FOSSIL FUELS ARE THE END PRODUCT
OF MILLIONS OF YEARS OF SUNLIGHT SHINING
ON PLANTS THAT GET CONVERTED TO OIL
AND COAL, AND GAS. WE ARE NOW UTILISING
THE LAST HOURS OF ANCIENT SUNLIGHT.**

LOW TECH



**SIMPLE, TRADITIONAL OR NON-MECHANICAL
TECHNOLOGY, SUCH AS CRAFTS AND TOOLS
THAT PRE-DATE THE INDUSTRIAL REVOLUTION.**