AI and the Future of Human Labor

Work, Art, and Human Flourishing in the Age of Automation

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PHIL 1150: Computing and AI Ethics

Before We Begin: You Never Have to Work Again

A relative you barely knew leaves you enough money to live comfortably for the rest of your life. It clears on **Monday**. Nobody will ever ask you to hold a job again.

Write down yes or no: do you quit?

Now the real question

Most people answer that one fast. The one that actually matters is: **what do you do on Tuesday?** Not the first week — anyone can spend a week. The Tuesday after the novelty wears off.

Commit before we go on

Say your Tuesday out loud. Then ask whether what you described is a **job**, and if not, why it was so easy to name something you would do for free and so hard to get paid for it.

Central Questions

- What is work, and why does it matter to human life?
- What makes work *meaningful*?
- How might AI transform—or threaten—the value we derive from work?
- Can AI do “real” work, especially creative work?

The Stakes

AI doesn’t just threaten jobs—it threatens the human activities through which we find meaning, develop skills, and express ourselves.

Connections to Previous Lectures

Lecture 1 (History): Previous IT revolutions—the printing press, the telegraph, automation—each transformed labor markets and produced moral panics about technological unemployment. What was different then? What might be different now?

Lecture 2 (Virtues): Aristotle valued work as a site of *habituation* and skill. If AI removes skilled practice from human life, what happens to the virtues cultivated through that practice?

Lecture 7 (AI): If AI cannot "originate" anything (Lovelace) or lacks genuine understanding (Searle), does that settle whether AI-generated art counts as real creative work?

Discussion

Is the threat AI poses to work fundamentally different from previous automation, or is this a familiar story?

Lecture Outline

Part I: What Is Work?

Part II: Why Is Meaningful Work Ethically Valuable?

Part III: How Might AI Transform Work?

Part IV: Meaningful Work Isn’t the Only Value

Part V: Can AI Do “Real” Work?

Part VI: Conclusion

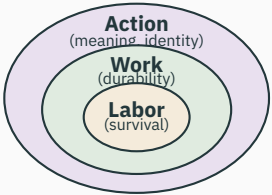
Arendt's Distinction: Labor vs. Work vs. Action

Hannah Arendt, *The Human Condition* (**arendt_human_condition**):

Labor (*animal laborans*): Cyclical activities for survival; leaves nothing behind; consumed as quickly as produced.

Work (*homo faber*): Creates durable objects that outlast the maker; builds a "world" of human artifice.

Action: Disclosing oneself through deeds in the public sphere; politics, speech, initiative.



Increasing durability and meaning

Hannah Arendt: Thinker of Human Plurality

Hannah Arendt (1906–1975)

- German-Jewish philosopher who **fled Nazi Germany** in 1933
- Was stateless for 18 years before becoming a US citizen in 1951
- *The Origins of Totalitarianism* (1951)—landmark analysis of fascism and Stalinism
- *The Human Condition* (1958)—her framework for labor, work, and action
- Covered the **Eichmann trial** in Jerusalem (1961); coined the phrase "**banality of evil**"



Hannah Arendt, 1933. Public domain.

Why This Distinction Matters

Arendt on Labor

> “It is indeed the mark of all laboring that it leaves nothing behind, that the result of its effort is almost as quickly consumed as the effort is spent.”

Labor is necessary but futile—it never ends, produces nothing lasting.

Work creates meaning by leaving something in the world: a table, a book, a building, a work of art.

Arendt’s worry: Modernity reduces everything to labor—even art becomes “content” to be consumed. We become trapped in cycles of production and consumption with no lasting achievement.

Marx: The Four Alienations

Arendt asks what work *is*. Marx asks what happens when work **goes wrong**.

Alienation (marx_manuscripts)

Under industrial capitalism, the worker is separated from four things:

1. **The product**: what you make belongs to someone else
2. **The activity**: the work itself is not yours to direct
3. **Species-being**: free, creative production is what makes us human—so degraded work degrades us
4. **Other people**: workers meet as competitors rather than collaborators

Why this matters for AI: each has a contemporary echo. Who owns the output of an AI-assisted worker? Who sets the pace when an algorithm assigns the tasks? Is prompting still creative production?

Note the disagreement: for Marx the problem is who *owns* the process; for Arendt it is what the activity *is*.

Historical Anxiety: Technology Replacing Work with Labor

This worry is old! Technology has long threatened to eliminate *craft* while preserving *toil*.

- **Luddites (1811)**: Textile workers smashing machines that "deskilled" their craft
- **Arendt (1958)**: Worried capitalism and automation would reduce all work to labor

Chaplin's *Modern Times* (1936)

The Tramp becomes a literal cog in the machine—tightening bolts on an assembly line until he has a breakdown. The famous "feeding machine" scene: technology optimizes labor but dehumanizes the worker. The film captures the fear that technology doesn't eliminate toil—it eliminates craft.

The Luddites: Technology and Craft in Conflict

The Luddite Movement (1811–1816)

- English textile workers who **smashed power looms** to protest mechanized labor
- Not anti-technology per se—they objected to machines **displacing skilled craft workers**
- Named after the legendary **Ned Ludd**, possibly a mythical figure
- The British Army **suppressed** the movement; leaders were hanged or transported
- Today the term "Luddite" is misused—the original Luddites had a coherent **economic critique**



"The Leader of the Luddites," hand-coloured etching, 1812. Public domain.

Work Broadly Construed: Including Artistic Creation

For Arendt, **artworks are the most durable products of work**—they persist across generations and build the cultural world.

Creative work = paradigm case of meaningful work:

- Involves vision, planning, skill development
- Leaves something lasting in the world
- Expresses the maker's identity and values

Other examples: Scientific discovery, engineering feats, philosophical writing, craft traditions.

Key insight: Work isn't just about earning money—it's about *making something* that matters.

The Psychology of Meaningful Work

Self-Determination Theory (**ryan_deci_sdt**):
Three basic psychological needs satisfied by meaningful work:

1. **Autonomy**: Sense of volition and choice
2. **Competence**: Feeling effective and capable
3. **Relatedness**: Connection to others

Research shows: Satisfying these needs $\rightarrow$ well-being, engagement, performance.

Need	Workplace Example
Autonomy	Flexible scheduling, input on methods
Competence	Skill development, mastery experiences
Relatedness	Team collaboration, mentorship

Discussion

Name the most meaningful work you have done. Were you **paid** for it? What does the answer suggest about how we assign wages?

Beyond Money: The Non-Monetary Value of Work

Work provides:

- **Identity and self-expression**: “What do you do?”
- **Structure and purpose**: Organizing time, setting goals
- **Social connection**: Colleagues, professional communities
- **Contribution**: Feeling useful, making a difference
- **Mastery and growth**: Developing skills over time

Research finding: Unemployed people suffer psychologically even when financially secure.

Discussion Question

If you won the lottery tomorrow, would you still work? Why or why not?

Meaningful Work and Beneficence

Four Pathways to Meaningful Work

(**martela_ryan_2016**): Autonomy + Competence + Relatedness + **Beneficence** (helping others)

Work feels meaningful when it **contributes to something beyond ourselves**. This explains why "bullshit jobs" (**graeber_bullshit_jobs**) feel soul-crushing even when well-paid—they lack purpose and contribution.

Objection

Not all jobs feel meaningful—many are tedious, exploitative, or pointless. Should we idealize work?

Transition: Why Does This Matter for AI?

AI threatens to transform work in fundamental ways:

1. **Replacement**: AI eliminates jobs entirely
2. **Deskilling**: AI replaces work with “mere labor”
3. **Augmentation**: AI handles labor so humans can do *more/better* work

The stakes: Not just economic (lost wages), but existential—what happens to human meaning and flourishing when work disappears or degrades?

Before examining AI’s impact, we need to understand *why* meaningful work is ethically valuable.

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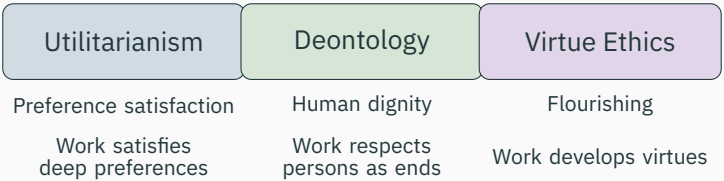
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Three Ethical Perspectives on Work



Each framework offers distinct reasons for valuing meaningful work—and for worrying about AI's impact on it.

Preference Utilitarianism: Work and Well-Being

Utilitarian Argument for Meaningful Work

1. We should maximize preference satisfaction.
2. Meaningful work satisfies deep, enduring human preferences (for autonomy, mastery, purpose, contribution).
3. Loss of meaningful work frustrates these preferences, causing suffering.
4. Therefore, we have utilitarian reasons to preserve meaningful work.

Empirical support: Work satisfaction strongly correlates with life satisfaction. Unemployment causes psychological harm beyond income loss.

Utilitarian Complications

But utilitarians must weigh *all* preferences:

- Consumers prefer cheaper goods (AI can provide)
- Society prefers efficient production
- Shareholders prefer higher profits
- Workers displaced by AI suffer, but others may benefit

Objection

What if AI-produced goods satisfy more preferences overall? Shouldn't we accept worker displacement for the greater good?

Response: Consider the *depth and durability* of work-related preferences vs. consumer preferences. Losing meaningful work may cause more suffering than slightly more expensive goods.

Deontology: Work and Human Dignity

Deontological Argument for Meaningful Work

1. Persons must be treated as ends in themselves, never merely as means (**kant_groundwork**).
2. Meaningful work treats persons as ends: it develops their capacities, respects their autonomy, recognizes them as rational agents.
3. Reducing work to mere labor treats persons as means: cogs in a machine, instruments of production.
4. Therefore, we have duties to preserve meaningful work.

Work that respects dignity allows for autonomous choice, develops rational capacities, and recognizes workers as persons with inherent worth.

Deontological Complications

- Does anyone have a *right* to meaningful work?
- Whose *duty* is it to provide meaningful work?
- What about work that is necessary but not meaningful?

Objection

Kantian autonomy is about rational self-legislation, not job satisfaction. You can be autonomous even in tedious work.

Response: But work conditions can enable or undermine our capacity for rational agency. Surveillance, algorithmic management, and deskilling reduce workers' ability to exercise judgment and make meaningful choices.

Virtue Ethics: Work and Human Flourishing

Virtue Ethics Argument for Meaningful Work

1. Human flourishing (*eudaimonia*) requires exercising virtues through practices (**aristotle_nicomachean**; **macintyre_after_virtue**).
2. Meaningful work is a practice with "internal goods"—excellences specific to the activity itself.
3. AI that eliminates such practices removes opportunities for developing virtue.
4. Therefore, we have virtue-ethical reasons to preserve meaningful work.

Work as a site for developing: practical wisdom (*phronesis*), craftsmanship, perseverance, justice, courage.

MacIntyre's distinction: **Internal goods** (excellence in the practice) vs. **external goods** (money, status).

Summary: Three Perspectives on Meaningful Work

Framework	Key Value	Why Work Matters	Concern About AI
Utilitarianism	Preference satisfaction	Work satisfies deep preferences	Must weigh against consumer preferences
Deontology	Human dignity	Work respects persons as ends	Deskilling treats workers as means
Virtue Ethics	Flourishing	Work develops virtues	Automation eliminates virtuous practice

Key insight: All three frameworks give us reasons to care about the *quality* of work, not just whether jobs exist.

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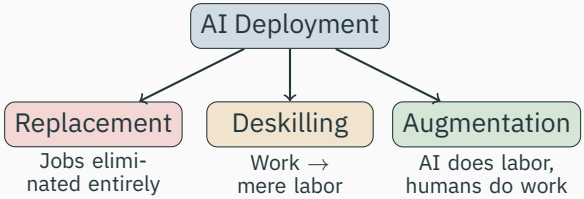
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Three Scenarios for AI and Work



These aren't mutually exclusive—different jobs face different futures. The outcome depends on *how we choose to deploy AI*.

Scenario 1: Job Replacement

Some jobs will simply disappear:

- Toll booth operators → electronic tolling
- Bank tellers → ATMs and apps
- Travel agents → online booking
- Cashiers → self-checkout
- Data entry clerks → automated processing

Scale: McKinsey estimates 400–800 million workers could be displaced globally by 2030 (**mckinsey_automation**).
This is the most *visible* AI threat—but perhaps not the most insidious.

Replacement: Ethical Analysis

- **Utilitarian**: Displaced workers suffer, but consumers and shareholders may benefit. Net calculation unclear.
- **Deontological**: Workers aren't mere instruments—displacement without support violates dignity.
- **Virtue ethics**: Loss of practice means loss of opportunity for flourishing.

Case Study: Trucking

3.5 million U.S. truck drivers face potential displacement from autonomous vehicles. Trucking provides middle-class income without college degree. Communities built around truck stops and logistics. What happens to these workers and communities?

The Power Loom: Automation's First Wave

The Jacquard Loom and Its Legacy

- Jacquard's **punched-card** loom (1804) could replace **several skilled weavers**
- Inspired Babbage's **Analytical Engine**—and thus modern computing
- Lovelace: it "weaves algebraic patterns as the loom weaves flowers"

The Parallel

Automation of **physical craft** then, of **cognitive work** now—the ethical questions are the same.



Jacquard loom, 19th century. Public domain.

Scenario 2: Deskilling (Work → Labor)

More insidious than replacement: AI doesn't eliminate jobs but **strips them of meaning**.

Deskilling is not new. **braverman_labor_monopoly** argued that industrial management systematically breaks skilled trades into simple, monitorable steps—cheaper to staff, easier to control, and emptier to perform.

Floridi's "enveloping" (**floridi_ethics_ai**): We adapt work environments to AI's limitations.

Workers become:

- Supervisors of AI systems they don't understand
- Button-pushers confirming AI decisions
- Data-entry clerks feeding AI systems
- "Human in the loop" for liability purposes only

The job *exists* but the *craft* is gone. This is Arendt's nightmare: work reduced to labor.

Examples of Deskilling

Profession	Before AI	After AI	What's Lost
Radiologist	Interprets images using expertise	Reviews AI-flagged cases	Diagnostic skill
Writer	Crafts prose through revision	Edits AI drafts	Voice, creative process
Designer	Envisions and creates	Tweaks AI outputs	Artistic vision
Programmer	Architects solutions	Prompts and debugs AI	Problem-solving craft

In each case: The worker may still have a "job," but the meaningful *work* has been hollowed out.

Deskilling: A Deeper Worry

Deskilled workers may keep jobs but lose:

- **Autonomy**: AI makes decisions, workers execute
- **Competence**: Skills atrophy from disuse
- **Relatedness**: Less collaboration, more algorithmic management

Case Study: Amazon Warehouses

Workers tracked by wristbands monitoring movements. Algorithmically determined pace—no human judgment about workflow. Bathroom breaks timed and penalized. Workers describe feeling like “robots” or “appendages to machines.” Jobs exist, but are they meaningful work?

Deskilling: Ethical Analysis

- **Utilitarian**: Workers may be employed but deeply unsatisfied; preferences for autonomy and mastery frustrated.
- **Deontological**: Treating workers as mere instruments of production—means rather than ends.
- **Virtue ethics**: No opportunity to develop excellence; flourishing systematically undermined.

All three frameworks converge: Deskilling is ethically problematic, even when it preserves employment.

Key Insight

"Having a job" is not the same as "having meaningful work."

Scenario 3: Augmentation (AI Does Labor, Humans Do Work)

Optimistic vision: AI handles tedious tasks, freeing humans for creative, meaningful work.

Examples:

- AI transcribes meetings $\rightarrow$ professionals focus on strategy
- AI handles routine legal research $\rightarrow$ lawyers focus on argumentation
- AI grades routine assignments $\rightarrow$ teachers focus on mentorship
- AI generates rough drafts $\rightarrow$ writers focus on voice and revision

AI as Steve Jobs's "bicycle for the mind"—amplifying human capabilities rather than replacing them.

The Augmentation Dream

Historical precedent: Technology has augmented work before.

- Spreadsheets didn't eliminate accountants—freed them for analysis
- Spell-checkers didn't eliminate writers—freed them from proofreading
- CAD software didn't eliminate architects—enabled more complex designs

Case Study: GitHub Copilot

AI coding assistant that suggests code completions. Programmers report: less time on boilerplate, more time on architecture and design. The *tedious* parts automated; the *creative* parts preserved. Is this the future of human-AI collaboration?

But Is Augmentation Inevitable?

Objection

"Augmentation is just a pit stop on the way to replacement. Today's copilot is tomorrow's autopilot."

Market incentives often favor replacement over augmentation:

- Cheaper to replace workers than to augment them
- Augmentation requires investment in training, restructuring
- Historical pattern: Benefits of automation accrue to capital, not labor

Augmentation doesn't happen automatically—it requires deliberate choices by employers, policymakers, and society.

You Be the Judge: The Automation Memo

On your desk Monday

You run a 200-person claims office. A vendor demo shows a system that handles about **70% of routine claims** end to end. Finance has costed the layoffs. Operations wants to redeploy people to the hard 30%. HR wants a six-month pilot.

You have to pick one. Then answer the follow-up:

- **Cut 60 jobs** — the savings are real and your competitors will take them if you do not
- **Redeploy** — keep everyone, move them onto the cases the system cannot do
- **Pilot** — six months, decide later, and accept that "later" usually means the first option

The follow-up

You just chose one of **replacement, deskilling, or augmentation** without naming it. Which one? And would the workers describe your choice the same way you just did?

Policy Implications

If we want augmentation rather than replacement or deskilling, we need deliberate intervention:

- **Tax structures** that favor augmentation over replacement
- **Investment** in worker training and reskilling
- **Regulations** requiring human oversight in certain domains
- **Safety nets** (UBI, universal basic services) for transitions
- **Worker voice** in decisions about AI deployment

Discussion Question

What policies would best preserve meaningful work while allowing society to benefit from AI?

Media Example: *WALL-E* (2008)

Pixar's vision of fully automated leisure:

- Humans on the Axiom have all labor automated
- Result: Atrophied bodies, passive consumption, no meaningful activity
- Ironically, WALL-E (the robot) has more "humanity"—curiosity, care, relationships

Message: A life without work (labor or work) isn't liberation—it's dehumanization.

Discussion

Is the Axiom a utopia or dystopia? The humans have no material wants—but are they flourishing?

Connection to Arendt: Without work, there's nothing durable to ground human existence. Only consumption remains.

Media Examples: *Metropolis* and *Modern Times*

Metropolis (1927):

- Workers as literal cogs in machines
- Robot Maria as false liberation
- Class division between thinkers and workers

Modern Times (1936):

- Chaplin's Tramp loses himself to assembly-line labor
- "Feeding machine" scene
- Technology optimizes labor but destroys humanity

Both films: Technology doesn't free workers—it can enslave them. The *design* of technology matters as much as the technology itself.

These anxieties from the early 20th century anticipate our AI concerns today.

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Other Values Matter Too

We shouldn't fetishize work—other goods matter:

- **Leisure and rest**: Time for family, friends, hobbies, contemplation
- **Health and safety**: Dangerous or unhealthy work isn't automatically good
- **Consumer welfare**: Cheaper, better goods improve lives
- **Environmental sustainability**: Some work harms the planet
- **Care work**: Often unpaid, often undervalued

Even Arendt valued *action* (politics, civic engagement) over work. Work is important but not supreme.

The Problem of “Bullshit Jobs”

David Graeber’s Thesis (graeber_bullshit_jobs)

Many jobs are pointless—even workers know it. These “bullshit jobs” provide income but no meaning.

Graeber’s categories: Box-tickers, task-masters, goons, duct-tapers, flunkies.
If a job doesn’t need to exist, is preserving it really valuable?
Implication: AI eliminating genuinely pointless jobs might be *good*.

Objection

But even “bullshit” jobs provide income, structure, and social connection. Eliminating them without alternatives causes harm.

Discussion

If a job feels pointless to the person doing it but the employer keeps paying for it, **who is wrong about its value**—and how would you tell?

Balancing Values Across Frameworks

Framework	Values Beyond Work	How to Balance
Utilitarianism	All preferences count equally	Weigh worker satisfaction against consumer benefit
Deontology	Dignity in all domains	Respect persons as workers AND consumers
Virtue Ethics	Leisure, contemplation, relationships	Work is one site of flourishing, not the only one

Key insight: The goal isn't to preserve all jobs—it's to preserve and create conditions for human flourishing, which includes but isn't limited to meaningful work.

A Balanced View

Don’t assume all AI impact on work is bad.
Don’t assume all AI impact on work is good.

Ask about any AI deployment:

1. Does it preserve or undermine **autonomy**?
2. Does it enable or prevent **skill development**?
3. Does it contribute to or detract from **human flourishing**?
4. How are **benefits and burdens distributed**?
5. What **alternatives** are available to displaced workers?

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The Question of AI Creativity

AI can now generate:

- **Images**: DALL-E, Midjourney, Stable Diffusion
- **Music**: Suno, AIVA, various generators
- **Writing**: GPT, Claude, and other LLMs
- **Code**: GitHub Copilot, Cursor, coding assistants

Questions:

- Is this “work” in Arendt’s sense? Does it create lasting value?
- Or is it sophisticated pattern-matching that produces ephemeral content?
- Can AI *originate* anything, or only recombine?

Arguments That AI Art Isn't "Real" Work

- **No intention**: AI has no vision, nothing to "say"
- **No lived experience**: Art expresses human life; AI has none
- **No struggle**: Mastery requires effort; AI produces effortlessly
- **No authenticity**: AI recombines training data, doesn't originate
- **No mortality**: Art derives meaning from finite human life

Objection

"AI art is just remixing—but isn't all human art influenced by predecessors? What makes human creativity fundamentally different?"

Arguments That AI Art Can Be “Real” Work

- **AI as tool**: The *human* using AI still makes choices, curates, refines
- **Photography parallel**: “Anyone can press a button”—yet photography is art
- **Outcome focus**: If it moves audiences, does process matter?
- **Collaboration**: Human + AI may create what neither could alone

Case Study: Refik Anadol

Artist uses AI to create large-scale data sculptures and immersive installations. AI generates; human curates, contextualizes, and presents. The work is displayed in major museums. Is this “real” art? Who is the artist?

Lovelace's Objection Revisited

Ada Lovelace (1843)

"The Analytical Engine has no pretensions whatever to *originate* anything. It can do whatever we know how to order it to perform."

The Originality Argument

1. Genuine creative work requires originating something new.
2. AI merely recombines patterns from training data.
3. Recombination is not origination.
4. Therefore, AI cannot do genuine creative work.

Critical question: Is premise 3 true? All human creativity builds on influences and predecessors. What makes human "recombination" different from AI "recombination"?

The Stakes for Human Artists

If AI can produce “good enough” creative content cheaply:

- Commercial illustration, stock photography, background music threatened
- Human artists compete with infinite free content
- The *craft* of art—years of practice—becomes economically irrelevant

Case Study: Greg Rutkowski

Digital artist whose name became one of the top prompts in AI image generators. His distinctive style, developed over decades, is now replicated by anyone typing his name. No consent, no compensation. Is this theft? Homage? Something new?

Discussion Question

Should AI-generated art be labeled? Should artists be compensated when their work is used for training data?

Discussion

Would you rather live in a world with **more art** that nobody struggled to make, or **less art** that someone did? Be honest about the trade.

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Key Concepts i

Hannah Arendt (*The Human Condition*, 1958) distinguishes **labor** (cyclical survival activity, leaves nothing behind), **work** (creates durable objects—*homo faber*), and **action** (self-disclosure through deeds). AI threatens to eliminate genuine "work" while leaving only labor and consumption.

Marx's alienation : under capitalism, workers are alienated from their product, their activity, their species-being, and each other. AI-driven automation may intensify all four dimensions.

Meaningful work is typically characterized by: skill and challenge, autonomy, clear contribution to a product, and recognition. These are the dimensions most at risk from AI replacement and deskilling.

Deskilling (Braverman): technological change often degrades skilled trades into low-skill monitoring tasks, reducing worker autonomy and meaning even when jobs survive.

Automation vs. augmentation : AI can replace human tasks wholesale, or it can extend human capabilities. The ethical question is which future we are building—and who decides.

Key Concepts ii

Universal Basic Income (UBI) : the proposal that everyone receives unconditional income regardless of employment. Addresses income loss but not necessarily the loss of meaning, identity, and structure that work provides.

Discussion

What kind of future of work do we want? And what would it take to get there?

References i