

The Frozen Self: Psychological and Cultural Barriers to Agency in the Age of Tokenized Identity

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Abstract

Human identity has always been revisable, and this freedom to change is worth protecting. This article argues that the emerging architecture of tokenized digital identity threatens that freedom at the level of the human psyche and in the shared cultural scripts by which people remake their lives. Governments already mediate identity in ways that either protect or foreclose the capacity to change, from the protections the United States extends to the records of the young to the national identity and scoring systems operating in China and India. Tokenized identity is where these trajectories converge. Drawing together the psychology of hope and self-efficacy, the philosophy of narrative identity, neo-Eriksonian developmental theory and the anthropology of self-presentation, the article advances an original claim. A permanent, searchable and interoperable record imposes a technological form of identity foreclosure, holding the person to a past self from the outside and abolishing the psychosocial moratorium on which healthy identity formation depends. The psychological result is a frozen self, defeated in hope and efficacy and bounded in the field of future possibility. The values at stake are agency, the American Dream of self-reinvention and the premise that the past need not be destiny.

Introduction

Human identity is something that evolves. People change across a lifetime, and the capacity to change is constitutive of personhood rather than incidental to it. The self, on the account that has come to organize the study of identity development, is not a fixed substance carried unchanged through the years but an ongoing achievement, formed and re-formed through cycles of exploration, development, and revisable commitment (Crocetti, 2026). Philosophically, this is the difference Ricoeur (1992) drew between the mere persistence of a thing through time and selfhood as an ongoing narrative a person authors and re-authors. To believe that one can change one's life is to believe that one has the potential to do so, and the exercise of that potential is what it means to have agency over one's own circumstances. The freedom to change is a quiet foundation on which a free life is built.

Identity is an inherent foundation already contested by the state. It is worth pausing at the outset to gather the ways governments now mediate identity, because the pattern is easier to see assembled than encountered piecemeal. Consider first what the United States already does for its own young. American law has long recognized a duty to shield the records of minors, on the developmental premise that a child's mistakes should not define the adult they will become, and that the state owes the young a genuine chance to reinvent themselves. Yet that protection is eroding in practice. No state fully seals or expunges juvenile records, some now publish them online, and access has quietly widened until a juvenile record increasingly follows a person into adulthood much as an adult record does (Radice, 2018). The protective principle survives in doctrine while the permanence it was meant to prevent advances in fact.

Abroad, the same trajectory runs further. China has built the most extensive system yet in which personal conduct across domains of life is linked to a persistent identity and a consequential score,

modifying behavior at national scale (Kostka, 2019; Liang et al., 2022). India has enrolled more than a billion residents in Aadhaar, a biometric identity infrastructure through which access to the essentials of life is increasingly gated, and through which identification becomes, in practice, the granting or denial of belonging (Rao, 2019; Singh, 2021). Underlying all of these is a shared direction of travel, the steady consolidation of identity into persistent, linked, machine-readable infrastructure, presented as the natural next step for secure and efficient digital life (Rowland & Estevens, 2025; Sel, 2025).

These are not separate stories. They are early moves toward a single architecture, and the momentum in every case runs toward permanence. Seen together, they are the visible leading edge of a system that does not yet fully exist but is very nearly here: a tokenized identity in which the whole of a life is bound to one enduring record like a type of identity intelligence. This article is concerned with what that convergence, once complete, would do to the human capacity for change. The relevance is present-tense. The question is not whether such an architecture is coming but what it will cost individuals and society when it arrives.

What is at stake is more than a private psychological asset. It is a cultural inheritance. The American Dream, in its most durable form, is the promise that a person can exercise agency to remake their own life, that origin need not be destiny, and that the country rewards those who reinvent themselves. The dream is, at its core, a claim about identity and its flexibility. It holds that who a person has been in the past does not fix who they may become, and that a life is authored. Psychologically, this is the same structure that hope theory describes as the perception of open routes toward a desired future joined to the belief that one can travel them (Richardson et al., 2025), and that self-efficacy theory describes as the belief in one's own capacity to bring about a different state of affairs (Bandura, 2023). The transformations the dream celebrates, the change of vocation, the migration, the education that lifts a person out of the circumstances of their birth, are all acts of identity revision, and the freedom to perform them is the freedom the digital self is now in a position to lose (Granic et al., 2020; Soh et al., 2024). When this article speaks of the freedom to change, it speaks of the psychological engine of that dream of reinvention and of the shared story a free society tells about what a life can become.

Something as personal as a tattoo can help illustrate the issue at hand. Once inked, a person is more or less stuck with it. Depending on where it sits on the body, they can hide it, cover it, or in some cases attempt to remove it, though rarely without a trace. Often tattoos hold a deep connection to personal identity. A tokenized identity is not so different. Both mark the person durably, and both invite public judgment wherever they become visible. The difference is one of reach. At least a tattoo might have the possibility of being concealed or never revealed. A permanent, searchable and interoperable tokenized identity follows the person into every room they enter.

Digital identity, in its earlier and familiar forms, left the capacity for change intact. A telephone number, an email address, a username, a social media handle: these were expressions of identity, characteristics through which a person presented themselves to the world, and they could be abandoned and remade at will (Rowland & Estevens, 2025). Even the identifiers that seemed most fixed remained, in practice,

revisable, and where they were compromised, they could be reissued. Think about the types of identifiers, like hair color, names, and even bankruptcies, which can all be changed over time. Whatever else these markers did, they did not bind the self to a permanent account of who it had been. They left the future open.

The architecture now taking shape threatens something categorically different. It is increasingly proposed that the security and convenience of digital life require the consolidation of identity into a single persistent credential, a token to which the data points of a person's life are bound and through which every transaction, movement, affiliation and expression can be traced, recorded and retrieved. The stated rationale is protection. But the same architecture that promises security also fixes the self in time. This article argues that such fixity freezes the psychological preconditions of agency itself, namely hope, self-efficacy and the capacity for narrative reinvention. The claim is distinct from the established finding that surveillance produces behavioral conformity. That literature, following Foucault (1977) and confirmed in recent empirical work on the chilling effects of surveillance on identity and expression (Stevens et al., 2023; Zuboff, 2019), has shown that the watched self-regulates. The argument here reaches beneath behavior to the cognitive machinery that makes agency possible and to the cultural scripts that make self-reinvention legible to a community. Permanent tokenized identity does not only suppress what a person does; it erodes the person's capacity to imagine and pursue an alternative self. The argument is therefore interdisciplinary by necessity. Agency lives in the psyche, but the actions through which people revise their lives are enacted in culture and read by others, and recent theorizing on digital identity has begun to treat the two as inseparable (Bingley et al., 2026).

Defining Tokenized Digital Identity

By tokenized digital identity, this article means an identity architecture in which the data points of a person's life, including transactions, movements, affiliations, credentials and expressions, are bound to a single persistent machine-readable identifier and written to a record that is permanent, searchable and interoperable across domains. The technical form may vary. It may be a centralized digital identification scheme administered by a state, a decentralized credential anchored to a distributed ledger, or a token linking physical assets and activities to a continuous digital footprint. Contemporary digital-identity infrastructures increasingly converge on precisely these properties of persistence and linkage, whatever their underlying design (Rowland & Estevens, 2025), and the legal understanding of digital identity has evolved to treat it as a distinct and consequential entity in its own right (Sullivan, 2010). The ledger-based version of a tokenized identity is closely related to blockchain. A blockchain is one way to build a record that is permanent and interoperable by construction, since entries are distributed, cryptographically chained and resistant to deletion by design. Not every tokenized identity runs on a blockchain, and the argument here does not depend on that particular mechanism. What matters is the family of properties, not the specific ledger, and blockchain simply represents one of the engineered forms of the permanence this article is concerned with (Marthews & Tucker, 2019).

Earlier identity markers were sheddable. A tokenized identity is not. It cannot be escaped, revised, or forgotten. Slowly adding piece by piece, it fixes the self in time. Permanence exists in three components, each bears differently on agency. The record is permanent: entries, once written, persist indefinitely, and the architecture is frequently designed, as in ledger-based systems, to make deletion difficult or impossible by construction. The record is searchable: what persists is retrievable, by institutions and increasingly by anyone with access, and retrieval strips a recorded act of the age, circumstance and emotional state in which it occurred. The record is interoperable: a single identifier links otherwise separate domains of life, including the financial, medical, professional, civic and relational, so that a recorded event in one domain follows the person into all the others.

It is the conjunction of these three properties that produces the effect this article is concerned with. A record that was permanent but not searchable would be inert. One that was searchable but not interoperable would be contained. It is the permanent, searchable and interoperable record together that converts identity from an evolving narrative into a fixed and portable account from which there is no exit. What happens to the psychological preconditions of agency, namely the capacity for self-reinvention, the perception of open pathways, and the sense of one's own efficacy, when identity acquires these properties?

This question also points to an anthropological one. The shift described here is not only a change in technology but a change in how a society keeps memory of its members and how it permits them to be seen as different from who they once were. In most human communities, forgetting has been the quiet partner of forgiveness. Reputations softened, witnesses moved away, and the past receded as memory faded (Vera Cruz et al., 2026). The tokenized identity abolishes that softening. It replaces the human tempo of forgetting with a machine that never forgets, and in doing so it alters the terms on which a person can rejoin a community as someone new (Deleuze, 1992; Rao, 2019). These shifts in social and cultural behavior are equally significant to those in psychology, and they should be considered together as one unified series of effects.

Agency as Self-Reinvention

Agency is not the momentary capacity to choose among options in the present. It is something larger and more temporal. It is the capacity to reinvent oneself over time, to mature, to make different decisions, to move purposefully in a new direction, to leave the past behind, to start over and to create a new life (Schlosser, 2019). Agency in this sense is agency-as-becoming. It is exercised not in a single choice but across the arc of a life, in the ongoing work of authoring a self that is not identical to the self one has been. To understand what tokenized identity forecloses, we must first see clearly what this capacity requires.

The psychology of hope offers a precise account. Hope, in the tradition that has organized its measurement, is not an emotion or a vague optimism but a cognitive structure composed of two reciprocal elements: the perceived availability of viable routes toward a desired goal, and the

motivational sense that one can initiate and sustain movement along those routes (Richardson et al., 2025). The two are mutually reinforcing. A person who perceives no route to a different life cannot sustain the motivation to pursue it and a person who has lost the sense of their own capacity to act will cease to perceive routes even where they exist. Hope, on this account, is the engine of self-reinvention. It is what allows a person to conceive of a future self and to believe that the way toward it is open. It is also, in cultural terms, the psychological substance of the American Dream, which asks that a person believe both that better routes exist and that they are capable of walking them (Demir, 2025; Hochschild, 1995).

Self-efficacy theory specifies the second precondition. Self-efficacy is the belief in one's capacity to execute the actions required to produce a given attainment, and it is the core of an agentic conception of human nature, the view that people are not merely acted upon but are able to exert control over the course of their own development (Bandura, 2023). Efficacy beliefs determine whether a person attempts a course of action at all, how much effort they invest and how they respond to obstacles. Where efficacy is high, difficulty is met with persistence, grit, and resilience. Where it is low, difficulty is read as confirmation that the effort was futile. The capacity for self-reinvention depends on the belief that one is an agent capable of remaking one's circumstances rather than a subject to whom circumstances merely happen.

The philosophy of narrative identity supplies the third element. Ricoeur (1992) distinguished two senses of identity. The first is the sameness of a thing that persists unchanged through time. The second is selfhood constituted through the ongoing narrative a person tells about who they are. The self, in this sense, is not a fixed thing but an ongoing act of self-authorship and a story a person keeps revising and retelling as life unfolds. Narrative self is not a purely private construction. It is authored in and increasingly through digital environments, where the story a person can talk about who they are is shaped and constrained by the persistent traces those environments retain (McAdams & Jennings, 2024). Reinvention, in these terms, is the re-authoring of one's narrative such that the past, without being erased, is taken up into a different account of who one is becoming.

The central insight of the identity-development tradition is that reinvention is developmentally necessary and possible. Identity is not settled once and carried forward unchanged but achieved through the freedom to explore alternatives before committing and to revisit commitments when they no longer fit; healthy development depends on the revisability of the self, and the current synthesis of six decades of research continues to place exploration and revisable commitment at its center (Crocetti, 2026; Erikson, 1968; Maehler & Hernández-Torrano, 2025; Marcia, 1966). The self that cannot revise its commitments is not stable in this framework. It is foreclosed, and then some: not merely committed without exploration, in Marcia's sense, but held there from the outside and permanently. It is, in a sense borrowed from the study of desistance, arrested, stopped and prohibited from continuing. Taken together, these accounts describe agency as a temporally extended capacity resting on three supports: the perception that pathways to a different life remain open, the belief that one is efficacious enough to travel them, and the freedom to re-author the narrative of who one is.

A further consideration deserves to be named here, because it changes the terrain on which all three supports rest. The relationship between the human psyche and the technologies that record it is no longer external. As identity becomes continuously datafied, the technological representation and the self begin to converge, so that how people are recorded increasingly shapes how they understand themselves and whether they attempt to become someone new. The emerging vocabulary of cybersophy names this convergence of human cognition, identity and values with the systems that track them (Ning & Ding, 2026), and recent theorizing treats digital identity not as a mere reflection of an offline self but as partly constitutive of identity itself (Bingley et al., 2026). The term is still taking shape, and this article uses it only in that spirit: as a way of marking that a permanent record does not sit beside the self but enters into it, influencing and conditioning the very capacity for self-conception on which reinvention depends.

The Developmental Arc

The capacity for self-reinvention is not exercised once but continually, and its role changes across the phases of a life. Seeing this arc whole is necessary to grasp why permanence, specifically, is the harm. A tokenized identity does not interrupt a single moment of choice. It freezes a process that is meant to continue from childhood to old age. Deleuze (1992) observed that the disciplinary institutions of an earlier era, which enclosed the individual within successive walls, each with its own beginning and end, were giving way to something continuous. He called this the society of control, in which the individual is no longer confined but perpetually tracked and dissolved into a divisible data profile modulated in real time.

The tokenized identity is the mature form of that profile. Where the older markers were discrete and sheddable, each belonging to a bounded episode a person could leave behind, the token is continuous and cumulative. There is no wall to pass through, no episode that ends, and no after. This is the property that makes the developmental arc the right unit of analysis. The record does not punctuate a life at intervals. It runs alongside the life without interruption, and it is against that unbroken running record that the work of self-revision must now be done.

The developmental arc begins before a person is capable of consenting to its terms. Children and adolescents now enter datafied environments at younger and younger ages, at a developmental stage at which the capacity to reason about long-term consequence is not yet formed. Adolescence is the period Erikson called the psychosocial moratorium, in which identity is meant to be tried on and discarded, the years of exploration in which a person experiments with affiliations, expressions, beliefs and selves, most of which will be abandoned in the ordinary course of growing up (Crocetti, 2026; Erikson, 1968; Granic et al., 2020; Soh et al., 2024). Experimentation is the developmental work of this stage rather than a malfunction to be corrected, and its healthy completion requires that the discarded selves be genuinely discardable. A record that captures each experiment and preserves it permanently does not simply burden the adolescent; it abolishes the moratorium itself, converting the very mechanism of healthy

identity formation into a permanent transcript and a lifelong liability. The adolescent is recorded before they are formed, and the record outlasts the self it captured.

The danger that the law has, in one domain, already recognized and tried to answer. The United States has long treated the records of the young as deserving special protection, on the developmental premise that the mistakes of a child are a poor guide to the adult. The state owes juveniles a genuine opportunity to reform which is why juvenile proceedings have historically been shielded from the public record in a way that adult proceedings are not. The principle is an implicit acknowledgment of the entire argument of this article: that a permanent, accessible record of who a person was can prevent them from becoming who they might be, and that protecting the capacity to change sometimes requires protecting a person from their own past. Yet the protection is increasingly a myth in practice. No state fully seals or expunges juvenile records, some publish them online, and their reach into adulthood has widened to the point where a juvenile record can function much like an adult one (Radice, 2018). The significance for the present argument is twofold. The protective intent shows that a society can recognize the value of engineered forgetting and legislate for it. The erosion of that protection shows how readily the drift toward permanence defeats such efforts even where they are deliberately made. A tokenized identity would not merely fail to protect the young. It would extend permanence to everyone, from the earliest years, by design rather than by neglect.

The reinvention that begins in adolescence does not end there, and the decades of early and middle adulthood are, for many people, the period of the most consequential self-remaking and maturing. Identity in datafied environments is an ongoing construction, actively managed and continually re-presented, rather than a static possession. Papaioannou et al. (2021) found that users treat certain data points, including name, occupation, interests and affiliations, as the core of their digital identity, and that the choices they make in presenting those data points are mediated by self-esteem and by the ongoing judgment of how they wish to be seen. The vocational change, the return to education, the geographic relocation and the reconstruction of belief or affiliation are each an act of re-authoring, and each depends on the ability to present a self to the world that is not simply the sum of what one has previously been. All these seemingly disparate points now converge through a process of identity intelligence.

Where the past follows in a permanent and portable record, each such reinvention is met with friction. The career-changer's prior field, the relocater's former associations, and the person remaking their circumstances are each preceded, at every consequential threshold, by a representation that fixes them as who they were. The recorded self exerts a constant drag on the emerging one, and the further a person tries to travel from their origin, the more forcefully the record pulls them back toward it. This is the American Dream running in reverse. Where the dream promises that effort carries a person away from a humble or troubled beginning, the permanent record ensures that the beginning travels with them, presented anew at every gate they try to pass.

The developmental significance of this drag is illuminated by the criminological literature on desistance and redemption. Blumstein and Nakamura (2009) demonstrated, using longitudinal arrest data, that the risk posed by a person with a prior offense declines with time offense-free until, after a period that varies by offense and age, it converges with the risk of a person who has never offended at all, a convergence they termed the point of redemption. Bushway et al. (2011) confirmed and extended the finding. The implications are striking. The predictive value of a record has a limited life, after which the record retains no informational justification for the constraint it continues to impose. The person has changed. The record has not permitted the change to register. What the desistance literature documents for the criminal record, this article contends, the tokenized identity generalizes to the entire population for the whole of life. The human organism is built to revise itself across an entire lifespan. The permanent record assumes that identity is fixed at the moment of capture. The two are incompatible, and the incompatibility is not a policy inefficiency to be optimized but a structural collision between an architecture and the developmental nature of the beings subjected to it. Subjectivity is lost and behaviors or actions are codified into ones and zeros.

The Frozen Self

The surveillance literature has established that being watched changes behavior. Under the internalized gaze of the Panopticon, the watched subject regulates itself and conforms to the expected norm in anticipation of a scrutiny it can never confirm is absent (Foucault, 1977), and recent empirical work has documented how surveillance chills conduct and the exercise of the very freedoms through which identity is formed and expressed (Stevens et al., 2023). Known as the chilling effect, it is not the deepest harm that permanent tokenized identity imposes, and mistaking the one for the other obscures what is genuinely at stake. Chilling operates on behavior. The mechanism this article names operates on the cognitive capacity for hope. Chilling suppresses an act the person still wishes to perform, bringing about conformity. The freezing of the self erodes the person's ability to want the alternative self that the act would have served, and with it the ambition that once reached toward the transformed self.

The distinction can be made concrete. Consider two people contemplating a fresh start, a change of career or a move to a new city to build a different life. The first hesitates over a particular act because it will be recorded. She declines to make a certain inquiry, join a certain group, or take a certain visible step, knowing the record will note it. She still wants the new life. She is simply managing her visible conduct around the fact of the record. This is chilling. The second has traveled further down the same road. Confronted at every turn by a record that precedes her into every application, every screening and every institutional encounter, she has come to experience the new life not as difficult but as unavailable. She no longer researches the career, no longer imagines the new city, and no longer rehearses the person she might have become. The wanting itself has gone quiet which is the freezing of the self, and it is a different and graver thing. The first person is constrained in what she does. The second is constrained in what she can conceive of doing.

The mechanism leading to the frozen self proceeds in three stages. The first is behavioral chilling, already described, the anticipatory conformity that the surveillance literature has documented (Foucault, 1977; Stevens et al., 2023). The second is aspirational narrowing. Here the account of pathways thinking becomes decisive. A permanent, interoperable record does not merely threaten exposure. It closes concrete routes. The record follows the person into the credit decision, the employment screening, the housing application, the professional credential and the new relationship, and at each juncture doors that would otherwise have been open are found already closed. As real pathways close, the perception of available pathways degrades. This is the crucial turn, where the person begins to see fewer routes to a different life, not through an error of perception but through an accurate reading of a genuinely closed environment. Because pathways thinking and agency thinking are reciprocal, the contraction of perceived pathways drains the motivational energy that would sustain the search for others (Richardson et al., 2025). The person does not merely find the doors closed. The person stops trying the handles.

In the transition to the next stage the movement from narrowed aspiration to a settled sense of fixity is not a single event but a spiral, tightened over repeated encounters with the record. Each closed pathway is also a datum about oneself, a concrete instance in which one's efficacy was tested against the world and found insufficient to overcome the representation. Efficacy beliefs are formed and reformed through precisely such experiences, and their repeated frustration is among the most reliable ways to lower them (Bandura, 2023). Lowered efficacy, in turn, further contracts the search for pathways, since there is little reason to test a handle the record has already shown will not turn, and the narrowed search yields still fewer experiences of success, which lowers efficacy again. Around this loop the person travels, not once but many times, each institutional encounter adding another turn. What begins as an accurate perception that some doors are closed hardens, through repetition, into a generalized expectation that the doors are closed as such, and finally into something no longer experienced as an expectation at all but as a simple fact about the kind of person one is. The representation has ceased to be felt as external, which is the threshold of the third stage.

The third stage is internalized fixity, and it is here that the mechanism reaches its most consequential depth. The token is a representation of the self, accurate or not, wanted or not, and because it is permanent and inescapable, the self is progressively constrained to live within the boundaries that representation imposes. The person is no longer free to become whatever they might have become, because of past decisions and circumstances, fixed in the record and endlessly retrievable, are now bound the field of future possibility. The self is not overwritten by the token. It is frozen by it. In Ricoeur's (1992) terms, the fixed record of what a person has been does not erase the self that authors its own narrative, but it immobilizes that self. The person still exists as a would-be author of their own becoming and is simply no longer permitted to author freely. Self-efficacy theory would predict that as the field of efficacious action is visibly and permanently narrowed, the belief in one's own efficacy contracts to fit it (Bandura, 2023). The psychological signature of that contraction is unmistakable. It is defeat, hopelessness and the slow extinction of ambition. Non-ambition, in this light, is not apathy or a failure of character. It is the rational response of a psyche that has correctly read a closed environment and conserved itself by ceasing to hope.

The permanence of the token raises a question that ordinary human forgetting used to answer. Can the past ever truly be forgotten? In the pre-digital world it could, at least in part. Memories faded, witnesses dispersed, and the sharpest details of an old episode blurred until the person was, in practical terms, allowed to move on. A digital token performs the opposite function. It exists to keep perpetuating the same information, and under its keeping neither the good nor the bad ever truly dies, which is why the freezing of the self is a durable condition rather than a passing mood. The natural process that once healed reputation and permitted return has been engineered out of the system.

A distinct and troubling case sharpens the point. The token is a representation, and a representation can be wrong. Records contain errors, entries are mismatched between people, and the compression of a complex life into machine-readable data points inevitably loses the context that made an act intelligible. When the record is accurate, the person is at least held to something they did. When it is inaccurate, the person is held to something they did not do, with no ordinary means of escape, because the same permanence and interoperability that make a true record inescapable make a false one inescapable as well. The person frozen by an accurate token has at least the cold comfort of authorship. The person frozen by an inaccurate token is sentenced for a life that was never theirs, and the freezing of the self proceeds all the same, since the psyche reads a closed environment whether or not the closure is deserved. The implications of error are therefore not a marginal technicality but a central reason to constrain what such a record may contain and how it may be corrected.

The empirical proxy that comes closest to capturing this progression is found in recent work on the psychology of digital identification. Wu et al. (2026) found that as identification with a digital collective intensifies, psychological efficacy does not rise indefinitely but follows an inverted-U. Beyond a threshold, efficacy deteriorates, and it does so in a revealing order, with behavioral efficacy degrading first, followed by affective and then cognitive efficacy. That behavioral efficacy is the first casualty of over-identification with a fixed digital representation is what the staged mechanism proposed here would predict. The mechanism is offered as a theoretical proposal consistent with the available evidence rather than as an established empirical finding as the direct, longitudinal measurement of hope-collapse under a fully tokenized identity regime does not yet exist.

Tokenized Identity in Practice: China and India

Two national systems already approximate the tokenized architecture closely enough to show its effects on agency. They are the closest existing referents for what this article describes, and they warrant direct treatment before the argument returns to the broader evidentiary base. China's Social Credit System is the most complete instance yet constructed. It links conduct across domains of life to a persistent identity and a consequential score, and it has been shown to modify individual behavior at national scale, with public acceptance resting in part on limited awareness of the system's more repressive potential (Kostka, 2019). In its municipal implementations it operates as a dual apparatus, rewarding conduct deemed good and disciplining conduct deemed deviant, and in doing so it reconfigures citizens as datafied subjects who can be measured, compared and governed (Liang et al., 2022). Its logic has been

read as a digital panopticon in which the fusion of persistent identity and continuous scoring produces exactly the anticipatory self-regulation the surveillance tradition describes (Gallagher, 2026), and its rating culture has been analyzed as continuous with, rather than alien to, the data practices of Western democracies (Wong & Dobson, 2019). For the present argument, the significance of the Chinese system is that it makes visible, at scale, the first two stages of the mechanism: the behavioral chilling and the material narrowing of pathways that follow when a permanent, linked identity gates access to the goods of a life.

India's Aadhaar is the next-closest referent, and it illuminates a different facet of the same harm. Enrolling more than a billion residents, Aadhaar binds a biometric identifier to the infrastructure through which welfare, banking and public services are accessed. Its designers presented it as an instrument of inclusion, a way to guarantee that benefits reach those entitled to them. In practice, it has also produced exclusion, as authentication failures and adverse records translate directly into the closing of concrete routes to the essentials of life, a burden that falls most heavily on those least able to absorb it (Singh, 2021). Read anthropologically, Aadhaar reveals that identification is never merely technical. The act of aligning a person with a database is productive of identity itself, and in the same motion it becomes the granting or the denial of belonging (Rao, 2019). Where the Chinese case shows the scoring of conduct, the Indian case shows the more basic power of a linked identity to determine whether a person can participate in society at all. Both systems, for all their differences, demonstrate the same underlying fact: that when identity is bound to a persistent, interoperable record, agency contracts to the shape the record permits.

Empirical Grounding of the Frozen Self

If the freezing of the self is real, its components should already be visible in the domains where permanent records and scored identities exist, even though no single study has yet assembled them into the whole. They are, and the strongest evidence comes from the desistance and redemption literature of Blumstein and Nakamura (2009), who analyzed longitudinal arrest data, established that recidivism risk declines with time offense-free until it converges with that of the never-arrested population, with the time to this point of redemption varying by offense type and age at offense. Bushway et al. (2011) corroborated the pattern and found that the predictive value of a record declines as a function of time and is lowest for older individuals with limited histories. The significance of this body of work is difficult to overstate. It demonstrates, with quantitative precision, that a permanent record continues to impose constraint long after it has ceased to carry the informational value that would justify it. The record outlives its own rationale.

Maruna's (2001) work on the narratives of desistance carries the evidence into the interior of the mechanism, to the stage of internalized fixity. Maruna found that whether a person desisted from offending was bound up with the story they could tell about themselves. Those who desisted authored what he called a redemption script, an account in which past wrongs were acknowledged but did not define the core self, which was understood as capable of change and worth redeeming. Those who did

not desist were held in a condemnation script, a narrative of being doomed, of forces beyond one's control, and of having nothing left to lose. The condemnation script is the documented, real-world form of the frozen self this article describes. Its psychological signature of fatalism, the surrender of ambition and the withdrawal of hope matches precisely the endpoint the mechanism predicts. The crucial point is that an inescapable external record makes the redemption script structurally unavailable. A person cannot successfully author a narrative of *no longer being* the person who did that when an authoritative, permanent and portable representation insists, at every institutional encounter, that they are exactly that person. The token imposes the condemnation script.

Beyond the criminological evidence, the material closing of pathways that drives the mechanism's second stage is documented in the systems examined in the previous section. Where access to the essentials of life is gated by a digital identifier, authentication failures and adverse records translate directly into the closing of concrete routes to credit, employment, housing and public benefits, as the experience of Aadhaar demonstrates (Rao, 2019; Singh, 2021). The scored-identity systems now operating at national scale offer a further line of evidence for the behavioral stages of the mechanism, since research on China's Social Credit System documents measurable modification of individual behavior under a regime in which conduct across domains is linked to a persistent identity and consequential score (Kostka, 2019; Liang et al., 2022). The evidence speaks most directly to the behavioral and pathway-closing stages. The claim that such systems produce the deeper internalization of fixity remains an inference rather than a demonstrated result.

Finally, the studies closest to the present topic in the psychology of digital identity reveal the gap between felt and actual agency that the mechanism exploits. Chen and Chen (2015) found that self-efficacy in managing privacy on social platforms did not straightforwardly protect users, and that higher self-efficacy was associated in some respects with greater rather than lesser disclosure. Applying social cognitive theory to citizens' relationship with surveillance capitalism, McCarthy et al. (2021) found that people described an illusion of control over their digital data, an awareness that meaningful control was, by the design of the system, effectively unavailable to them. That people may feel capable of managing a digital identity they cannot in fact escape is the precondition on which the freezing of the self operates. The sense of agency is engaged and then, as the permanence of the record makes itself felt, defeated. The evidentiary picture, taken together, is one of convergence rather than proof. Every component of the proposed mechanism appears in the existing literature: the persistence of a record beyond its justification, the imposition of a condemnation narrative, the material closing of pathways, the behavioral modification under scored identity and the gap between felt and actual control.

The Values at Stake

To this point the argument has been descriptive. It has sought to establish what permanent tokenized identity does to the psychological and cultural capacity for self-reinvention. There remain several concerns about the exact implementation and adoption of any tokenized digital identity because the freezing of reinvention is a harm and not just a neutral technical development. At the root is a single

value, individual autonomy, from which the others follow. The American Dream of self-remaking, the protection owed to the young, the check on concentrated power and the cultural inheritance of the second chance are each what autonomy requires under particular conditions. None of these belongs to any faction. They are goods that a wide range of moral and political traditions recognize and share. The root value is individual autonomy. The capacity to become someone other than who one *has been* is not a peripheral liberty but a constituent of personhood and of a free life. A person whose future is bound to their recorded past is not fully the author of their own life. They are, in the portion of life the record governs, its subject. A society that forecloses reinvention forecloses autonomy in its most fundamental form, the freedom to determine, over time, who one will be (Orianne & Eustache, 2023). To defend the revisability of the self, is to defend autonomy at its root, and the values that follow are each a form this same commitment takes when a particular kind of person or good is at stake.

The most distinctly cultural of these is the American Dream. More than a slogan about prosperity, the American Dream is a national script about agency. It holds that a person can start from anywhere, exert effort and remake their circumstances into something better, and that the arc of a life is theirs to author rather than their inheritance to accept. The whole moral force of the dream rests on an open future, on the premise that the past need not be destiny. This is the same premise that hope theory describes in the language of pathways and agency, and self-efficacy theory in the language of belief in one's own capacity. The American Dream is the cultural expression of the psychological mechanism this article has traced, agency. A permanent tokenized identity strikes directly at it. By fixing a person to the record of who they were, the token converts the open future the dream requires into a closed ledger in which the first chapter is never finished being read. What is placed at stake is therefore the working promise on which a great many people order their lives: that agency, honestly exercised, can carry a person somewhere new.

The second value is the protection of the developmentally vulnerable. Permanence attaches earliest, and binds most cruelly, to those least able to consent to it, the children and adolescents who enter recorded life before they are capable of understanding what a permanent record means. This is a value society has already tried to honor, and its partial failure to do so is instructive. American law built protections for juvenile records on exactly the premise this article defends, that a person should not be held for life to what they did before they were formed. Yet those protections have proven fragile against the drift toward permanence, eroding until a juvenile record increasingly follows a person into adulthood despite the law's stated intent (Radice, 2018). The lesson is sobering. If a protection deliberately constructed to preserve the reinvention of the young can be worn away by the mere expansion of access, then a tokenized identity built for permanence from the outset would not erode the safeguard but abolish it and would do so not only for former juvenile offenders but for everyone, from the earliest years of recorded life. To insist on this protection is not to advance a partisan position but to conserve a moral achievement that is already under strain.

The third value is skepticism of concentrated power. A permanent, interoperable identity record is among the most complete instruments of observation and control ever assembled. It is total, in that it spans

every domain of a life. It is continuous, in that it never ceases recording. And it is asymmetric, in that the institutions holding it possess what the individual described in it cannot access, contest or escape. Whether the holder is a state or a corporation, the concentration of such a capacity in institutional hands, beyond the reach of the individual it describes, is precisely the kind of unchecked power that a long tradition of political thought has warned against. The wariness is not ideological. It is the accumulated wisdom that power over the record of a person's life should not rest, unaccountable, in hands other than their own.

The fourth value is reinvention as a cultural inheritance. The belief that the past need not be destiny, that a person can leave an old life behind and begin again, is woven deeply into the self-understanding of free societies. The one who remakes themselves, who crosses into a new country or a new vocation or a new conviction and becomes someone new, is not a marginal figure but a central one in the stories such societies tell about what life can be. Tokenized identity is incompatible with cultural inheritance at its core. It replaces the open future on which the possibility of a second act depends with a closed ledger in which the first act is never finished being read. These values are not separate concerns but one value seen from several sides: that the freedom to change is a good worth protecting, and that permanent identity forecloses it at every level at which it matters, in the interior life of the individual psyche, in the vulnerability of the child not yet formed, in the standing of the citizen before institutions and in the account a culture gives of what a human life can become.

Considerations for Future Tokenized Identity

If the diagnosis of a tokenized identity is correct, it bears on how any future system of tokenized identity ought to be weighed before it is built. The properties that produce the freezing of the self, namely permanence, searchability and interoperability, are design choices rather than natural necessities, and identity architectures can in principle be built on different principles. *What should a token contain?* A record that binds every domain of a life into a single permanent account is precisely the instrument this article has warned against. The argument suggests that a tokenized identity ought to carry the minimum necessary to serve a specific, bounded purpose, so that a credential proving one fact does not become a dossier revealing all others. Selective and minimal disclosure, rather than total linkage, is the design principle most consistent with preserving the revisability of the self, and it is notable that some emerging identity frameworks are already exploring cryptographic techniques intended to prove a claim without exposing the underlying data. The concern raised by inaccurate records reinforces this consideration. The less a token contains, the smaller the surface on which a consequential error can be written.

Who should be able to access the record? Even a minimal token becomes an instrument of the freezing of the self if anyone may retrieve it at any threshold. The argument points toward strict limits on access, so that the data points bound to an identity are visible only to those with a specific and legitimate need, for a specific and legitimate purpose, and with the knowledge of the person described. Access without accountability is the mechanism by which a recorded past comes to precede a person into every room, and constraining it is not a technical afterthought but a direct condition of preserving agency. Individuals

should retain the ability to share and restrict their tokenized identity at will. *Can the token be changed?* This is the matter on which the whole argument finally turns, because it is permanence, more than any other property, that converts a record into a sentence. If the natural human process of forgetting is engineered out of a system, then the system must find a way to engineer forgetting back in. Records might expire. Entries might be revisable and, where appropriate, erasable. There might be a mechanism by which a person can correct an inaccurate token and, after a defined period, shed an accurate one whose predictive value has lapsed, in the way that the desistance literature shows a criminal record's value lapses with time offense-free (Blumstein & Nakamura, 2009; Bushway et al., 2011). A capacity to update the token, and in some measure to be forgotten by it, would be the structural equivalent of the second chance that free societies have always extended in less formal ways. Whether such an architecture can be realized at scale is an open question. What the present argument establishes is why it is worth pursuing, because the alternative forecloses, at the level of the human psyche and the shared culture, the freedom on which a life of one's own making depends.

Summary of the Frozen Self

Throughout all of humanity individuals have reinvented themselves. The self is not a fixed substance but an ongoing achievement, authored and re-authored across a lifetime through the exercise of hope, the belief in one's own efficacy and the freedom to tell a new story about who one is becoming. These three capacities are not independent. Hope depends on the perception that pathways remain open, efficacy depends on the experience of acting successfully upon them, and narrative depends on the freedom to reinterpret the past in light of a different future. Because they reinforce one another, they can also fail together, and it is this interdependence that permanent tokenized identity exploits. By binding the data points of a life to a record that is permanent, searchable and interoperable, such a system converts the revisable self into a fixed representation and constrains the person to live within its boundaries, not by overwriting who they are but by freezing who they might yet become.

The harm proceeds by degrees. It begins as behavioral chilling, the anticipatory conformity of a person who knows they are recorded. It deepens into aspirational narrowing as real pathways close and the perception of open routes contracts to match them. It settles, finally, into internalized fixity, in which the representation is no longer felt as external but as a simple fact about the kind of person one is. Around the loop between closed pathways and lowered efficacy the person travels until ambition itself goes quiet. This quieting is not apathy or a failure of character. It is the rational response of a psyche that has correctly read a closed environment and conserved itself by ceasing to hope.

The frozen self is foreclosure enforced from the outside and made permanent, holding a person to a prior self even after they have done the developmental work of becoming another. In doing so it abolishes the psychosocial moratorium, the protected space for trial and error on which the healthy formation of a self depends. This is the paper's central contribution: not that surveillance chills conduct, but that a permanent, inescapable record forecloses the capacity for reinvention itself. Every component of the mechanism is already visible. The desistance literature shows a fixed record holding a changed

person to an outdated self, and Maruna's condemnation script names the fatalism that results. China's Social Credit System and India's Aadhaar show, at national scale, how a persistent, linked identity narrows the concrete pathways of a life. The studies closest to the digital self reveal the gap between felt and actual control on which the freezing operates. The harm they trace is at once psychological and cultural, reaching the individual psyche and the shared scripts by which a community allows its members to become someone new.

Against this the argument has set a single, simple good: the freedom to change. It is worth protecting because it is the condition of autonomy, and every other value follows from it, the American Dream of self-remaking, the safeguard owed to the young, the check against concentrated power and the inheritance of every society that has told its members they might begin again. The systems that will decide the fate of that freedom are being built now, and the questions they raise are too consequential to be settled by engineers alone. Greater dialog and research across the interdisciplinarians of psychology, anthropology, law, and technology are needed to ensure freedoms to reinvent one's self are not arrested for the sake of progress.

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