Spheres of Self

Performativity and Parasociality in the Metaverse

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Introduction

The purpose of this document is to articulate a high level blueprint for Koji by exploring the ways in which Koji's product, platform, and mission intersect with broader social, cultural, and technological shifts.

We center this exploration by first proposing a novel (and perhaps, more underwhelming) definition of "the metaverse." We then use that definition to further examine the nature of human relationships and the ways in which our conceptions of *self* have been evolving in order to more effectively participate in "the metaverse," specifically arguing that this evolution has given rise to a new imprint of expression we term one's *parasocial self*.

We then map this thesis to today's world as it is reflected in the dynamics of social media and what is broadly termed the "creator economy." We argue that the theoretical framework we build in the preceding sections provides a new way to understand the challenges of today's social networks, as well as makes obvious the correct path forward.

It should come as no surprise that praxis, we argue, involves what we are building with Koji.

What follows is a deep dive into the foundations of the Koji platform where, by exploring the impacts and roadmaps of those foundations, we illuminate the ways in which the social and behavioral forces of the metaverse begin to converge—quite naturally—in a way that gives rise to a more equitable, expressive, and meaningful construction of society.

The Metaverse

Background

We have chosen to anchor our thinking in the idea of "the metaverse." At present, it is nearly impossible to participate in technology discourse without coming across this term. Meta (née Facebook) has most publicly aligned its future with this term, but Roblox, Epic Games (via Fortnite), and others also find themselves leveraging the metaverse as a useful frame for thinking about the future.

Most discussions of the metaverse center around end-user implementation details, like high-fidelity 3D, virtual reality headsets, etc. This is not unexpected; it is an accessible and exciting idea to imagine. *The Matrix*, *Ready Player One*—a glamorous science-fiction future.

To seek to understand the metaverse through the lenses of VR, virtual 3D offices, and the like, however, is to miss the forest for the trees.

A Novel Definition of the Metaverse

While less glamorous than virtual reality science fiction landscapes, we believe that constructing a definition of the metaverse that is grounded more fundamentally in social structure will allow us to more effectively map its implications and understand the transitional nature of our current moment.

As a preface, we do not believe that defining the metaverse is a zero-sum pursuit, and we are simply using our definition to create an axiom that guides the thinking that follows in this document. Thus, with our apologies to M. Ball, we define the metaverse, quite simply, as:

> *The phase of human society where digital expression is more meaningful than physical expression.*

Through this lens, our transition to the metaverse becomes a cultural shift as a consequence of technology and connectedness, rather than the result of some specific technological innovation that then begets a cultural shift.

Yes, we might all someday work in virtual offices inside the Zuckerverse or wear Fortnite skins as if high fashion. The question we wish to foreground is not whether these things are technically possible (they obviously are), but rather to ask: *What about the world must change in order for these technological innovations to be assigned value and meaning by society?*

It is perhaps one of the high follies of the technologist (and a folly with which your author is certainly deeply familiar) to assume that choice, at a social level, gravitates toward quality or fidelity. As humans, we value experiences and objects simply because we live in a world and a moment in time in which those objects have been assigned value by the superstructure of society. Following this line of thinking, the metaverse marks the moment in time in which digital experiences, relationships, and goods are assigned this value.

Motion Sickness

Understanding the metaverse as a tectonic shift of the superstructure of society, characterized by a breakdown and inversion in the previously separate systems of physical and digital value, provides a useful tool for understanding the culture and society in which we find ourselves.

This understanding is useful because it allows us to view this change as a slow-moving, structural shift, rather than fast-paced, unpredictable chaos. Indeed, the ground has been shifting beneath our feet for some time now. We've only just looked down and awakened to the sensation.

In fact, one could argue that many of us are already in the metaverse.

That said, between echo chambers and fake news; crypto, DeFi, NFTs; meme stocks, privacy, and unprecedented inequality; your next-door neighbor's teenage child with a TikTok following the size of a small nation; manufactured outrage, astroturfing, and misinformation; reality certainly feels unsustainable. We are burning faster and brighter than ever before, and surely the center cannot hold.

Thus, we can (and should) ask the question of whether any of this is *good*. We believe, however, that there is a set of formative work whose development is required before one can approach questions of that nature. Attempting to engage with these types of questions using present-day lines of inquiry simply leads, in our experience, to vertigo.

New frameworks must be developed and internalized if we wish to effectively engage in thinking around the higher-order consequences of the metaverse. One of our goals in the sections that follow is to provide an example of "Metaverse Thinking" by constructing and describing one such framework as it relates to an evolved concept of the *self*, and then applying it as a tool for understanding our relationship to social media and what today is termed the "creator economy." We will then further test that framework by using it to constrain an exploration into a more sustainable and equitable future for these concepts based around a set of modern economic tensions.

Performativity In Digital Spaces

Participating in society has generally required for each of us to perform two modes of self-expression: a private self and a public self. The private self is organic and personal; it is who we are in casual situations and among friends. The public self is that which we present not to a specific individual but to a more abstract collective set of society, at some base level seeking its validation.

When viewed in terms of named relationships and power dynamics, our private self is the self that expresses in spaces where agency is distributed evenly among other individuals and shared discourse emerges accordingly. In contrast, our public self expresses in opposition to a more nebulous, intractable concentration of agency. In loose terms, it performs for an audience; for voters; for employees; and can perhaps best be understood through the idea of "putting oneself 'out there,'" so to speak.

In digital spaces, the private self emerges in chat and messaging, playing games with friends, and the like. These are low-stakes situations in which we are at our most vulnerable. The public self emerges on Twitter timelines, Instagram posts, and in other social networks; higher stakes situations wherein we confront the superstructure head on.

Participatory anxieties take different forms within these selves as well, because the consequences of failure are different. The private self risks losing something it values: *Will my friends like the real me? What if I push them away?* The public self does not risk loss, but rather risks confronting irrelevance: *Am I funny enough to tweet this joke? Pretty enough to post this picture?* The risk is to be ignored.

There is obviously much more nuance than this. We perform many discrete private selves, depending on who we are with, or when we are alone. Sometimes, the public self performs not for a collective but for an individual who themselves is "up-leveled" by the mind into an abstraction, rather than being seen as an individual: the lover; the boss; the customer. However, the coarse level of observation we define in this section provides sufficient context to frame the next dimension of our argument.

A New Mode Of Expression

Previously, curating and performing our private and public selves (in whatever multiplicities they take) has been sufficient to engage effectively with society. To move to the metaverse, however, requires the construction of an additional mode of identity and expression that is neither private nor public, even though it pretends, simultaneously, to be both. We call this the *parasocial self*.

The parasocial self is that which passively solicits engagement from others. From the perspective of those others, the parasocial self appears as a public performance of the private self. It embodies an inversion of the dynamics of agency we previously ascribed to the public self: we present the parasocial self publicly and invite others to approach and engage with it, allowing the public to discover and interact, in a structured, curated way, with something that feels like our private self—on our own terms. In this sense we simultaneously multiply our agency as well as de-risk the vulnerability of exposing ourselves before an audience.

The parasocial self is the professor holding office hours, the influencer offering one-on-one advice. If the private self is characterized by its unstructuredness and vulnerability, and the public self is characterized by the performance of an identity that engages with the broader world by coercing it into something structured, the parasocial self is the structured presentation of an interface by which the world can choose to approach us and engage us.

Through another lens, borrowing concepts from the world of gaming, if the player-controlled "real" you is offline or otherwise occupied, a well-curated parasocial presence effectively functions as the "NPC" version of yourself that is always available for structured interaction and audience development.

The parasocial self is a critical component of the metaverse's metagame, as the asynchronous and always-on nature of digital spaces requires a means of scaling presence in order to grow reputation and influence by way of well-developed parasocial relationships.

PRIVATE SOCIAL PARASOCIAL
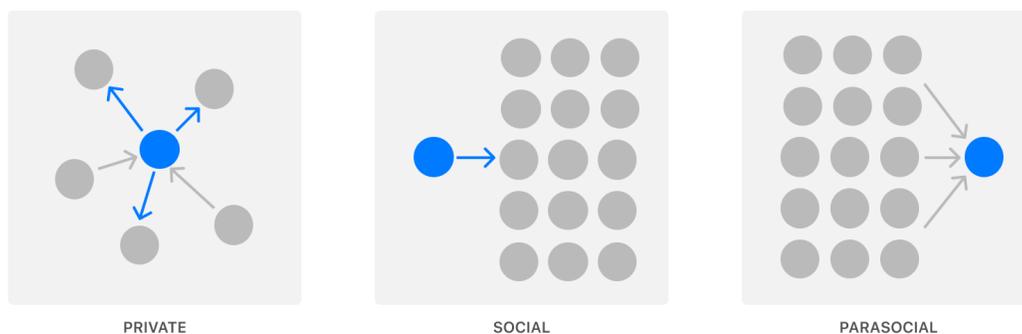
The Collapse of Individual Identity

In digital spaces, brands can have personalities and influencers with whom one has never met can feel like close friends. These are consequences of the same thing. The parasocializing force that humanizes corporations also serves to abstract the individual, collapsing individual identity into something more synthetic and structured.

Indeed, the parasocial identity is illustrated most clearly by what we today describe as "influencers" or "creators." The ideas of parasocial interactions and parasocial relationships are, of course, the original source of our term, and much research has been devoted toward examining those ideas and their effects on both performers and audiences. The novelty in our argument rests on the idea that, in the metaverse, parasociality is not a passive side effect of media consumption, but rather an active, necessary, and beneficial mode of self expression of which each participant is required to curate.

The Digital World Today

Mature Toolchains Support Public and Private Expression

Today, we have many options for expressing our public and private selves in digital spaces. The private self flourishes in messengers, group chats, multiplayer video games; the public self can choose from a myriad of venues in which to play. Each social network brings its own flavor of discovery and rules of interaction and success, whether it be the ability to write good tweets, compose great long-form video content for a YouTube vlog, or record compelling short-form on TikTok. There is, increasingly, a space for everyone.

We believe these spaces will only continue to evolve. For example, the tools that support our digital, remote-first technology workforce lead to innovations that lend themselves well to personal interactions, such as breakthroughs in presence, video conferencing, group watching, and more.

On the other side, new social spaces will continue to emerge and bring with them new rulesets, dynamics, and discovery algorithms to connect new people in new ways. We argue that this is the primary value of social networks and should be their sole focus: developing and providing different "flavors" of content and algorithms.

The issue, as we see it today, is that these social spaces are also implicitly responsible for owning and developing the parasocial identities of their users, which leads to a fragmented, unstable, and milquetoast rendering of this critical piece of self-expression.

Tight Coupling Bottlenecks Parasocial Development

If we use our framework to understand parasocial expression as separate from public social expression, some of the issues emerging from today's social media services can, perhaps, be understood in a new light.

In theory, the public self expresses itself by "showing up" and bringing itself to a place. This is at odds with the very first action one takes when joining a new social network, which is effectively to be "born a blank slate" by creating a new account.

This account creation marks the beginning of what we define as the user's relationship to the network. Some aspects of this relationship are necessary in order to facilitate the network and the user's use of it, like authentication, followers or some other social graph, and display features like usernames and profile pictures. These answer the question, "Who am I when I am here?" or "How do I present myself when I show up here?"

Of course, the clothes we wear to a costume party are not intrinsic elements of our beings. They are simply part of how we perform within a specific space. The issue, then, arises when, due to the absence of a neutral, disinterested parasocial identity, the identity we perform within a network becomes the only identity through which an audience can understand us. Thus our "true self" becomes tightly coupled to our public expressions within a specific social space.

The effect of this is that individuals who are successful in a social space must do so either by focusing on a single network and simply accepting that their larger identity is coupled to that network and its particular "flavor" of algorithm, or they must diversify and perform and develop different selves on different networks, a fractured, exhausting experience for individuals and the audiences with whom they have relationships.

The vast majority, especially those we today refer to as "creators" who are, to introduce a new phrase, already "making a living in the metaverse," choose this latter path. The person I follow on TikTok does not feel the same as the one I follow on Instagram or YouTube; they are forced to perform different identities in order to be successful in each of these spaces.

This lack of continuity across networks is a vertiginous experience, and perhaps one of the reasons why creators and influencers are so often derided as "fake" or "shallow." In the physical world, where continuity of identity is much more intuitive across social spaces, we would not describe someone who wears athletic clothes to attend group fitness classes as "fake" because they also, sometimes, write sad songs in their pajamas.

The more intuitive structure, we argue, is a structure where one's parasocial identity is decoupled from one's identities as they exist in relation to discrete social spaces.

Isolating the Parasocial Self

If the metaverse is to flourish in a way that is empowering, equitable, and sustainable, the parasocial self must exist in relation to the individual—fully disintermediated—and not in relation to the individual and that individual's relationship with a social space. This introduces continuity of self across social spaces, healing the fractures that exist today, and allowing for the development of a meaningful, *whole* self within the metaverse.

[As a brief aside: We do not make a one-to-one mapping between "self" and "human individual." We believe that one of the more interesting higher-order consequences of our shift to the metaverse will be a renaissance of self-expression, where one is free to pseudonymously explore as many facets of self as they wish to present. This, however, is a subject for a different inquiry.]

As a consequence of this decoupling, social spaces can focus simply on being compelling and valuable social spaces. The problem of supporting their users' parasocial identities is not theirs to solve; they simply need to support its discovery and access. In a world where the parasocial self is truly portable and is decoupled from any individual social network or space, these networks simply become "pipes" akin to television channels or different venues of nightlife. We can show up in any of these spaces and express ourselves how we want to express ourselves, without necessarily binding our larger identity to any one specific "channel."

This line of thinking does not mean we are imagining a world where social networks no longer have individual profiles, or that there will only be one method of signing in to a service. Of course these services still retain individual user profiles, social graphs, and display identities. The shift in thinking is that those individual profiles are only necessary to support the user's relationship to the network (allowing others to follow them, see their posts, etc.), and are not a substitute for the user's *real* self.

From these profiles, one is able to "move up a level" to interact with the user's parasocial profile, which is something decoupled from any one specific network. Indeed, one could certainly imagine these social network profiles exposing individual aspects of a user's parasocial profile from within their on-network profile; but, again, these aspects are not managed by the network itself.

The Risks of Dependence

Before exploring the applications of our thinking, we wish to call attention to two detrimental effects of parasocial identities remaining tightly coupled to social networks and spaces.

The first is on the topic of moderation. In the physical world, a social space can ban you or otherwise remove you. This does not affect your ultimate ability to express yourself, it simply affects your ability to express yourself within that specific space. Today, because our parasocial expression is so tightly coupled to our identity within specific networks, removing someone from the network (for whatever reason) carries with it the much more meaningful consequence of affecting that person's ability to express themselves generally.

If general digital expression is allowed to persist because it is engendered by the parasocial and thus removed from an individual network and its policies, banning users becomes a much less consequential action for a network. A ban is then simply restricting access to a single space and removing a user's ability to use the network's algorithms to amplify their social expression; it does not wholly remove one's ability to express oneself, as could be argued is the case today when someone is banned from a space like Twitter or Instagram.

The second risk of a world in which one must attempt to curate a whole identity within the context of each network in which they participate is that the potential for technology to innovate on new modes of that expression is severely limited. This is not for lack of technology or ideas, but simply because users, broadly, will only adopt new modes of parasocial expression when there is parity of functionality across their identities on all these networks. When this is not the case (for example, Twitter's attempts to expand user profiles by adding tipping, NFT display, etc.), users are forced to either adopt and manage those innovations solely in relation to one network, or they must amplify a fractured self by attempting to route audiences across social spaces so that audiences can access the expression present on another network.

We believe that while the innovation in the digital tools that allow us to express our private and public selves has been incredible, it only serves to further highlight the lagging innovation of the digital tools that allow us to express our parasocial selves (i.e., what is today referred to as "creator economy tools").

Praxis

Introduction

With this framework defined, we can start to explore the parasocial self in the metaverse. We begin by articulating the role we see Koji as playing within the development, curation, and expression of the parasocial self, specifically looking to the ways in which Koji introduces a device for framing one's parasocial identity, as well as the ways in which the fundamentals of the Koji platform empower long-term, sustainable innovation in new modes of parasocial expression. Then, we zoom out and look to the future to explore how these ideas affect the development of the metaverse over a longer horizon.

The Parasocial Platform

For the purposes of this exploration, we break down the Koji platform into four foundational components: its link in bio launcher, app store, app runtime, and developer ecosystem. We believe that each of these components is required to provide the necessary structure and scaffolding to give rise to a long-term, sustainable platform for the expression of the parasocial self in the metaverse.

A New Type of Springboard

While over time we believe this certainly changes, the metaverse today is predominantly two-dimensional. As such, the most natural expression of the parasocial self is one that feels familiar and accessible to ordinary consumers. It is from this lens that Koji repurposes the idea of the "home screen" or "springboard" from smartphones.

The smartphone springboard provides each device owner a canvas on which to curate the apps and information they decide are most important. It is not a destination in and of itself, aside from personalization enough that, on waking a phone lying on a table, for example, one can quickly deduce whether or not it belongs to them. The smartphone springboard is often a deeply personal experience; holding and using another's phone often feels alien in a way that should be surprising, given that the device (and, likely, the majority of the apps installed on it), is the same as the one in our pocket.

Yet, even with such opinionated structure—grids of icons, widgets, a background image—each of us is able to curate an interface that becomes not only an extension of our proprioception, as is the case with classical tools like hammers and pens, but also of our interiority. These panes of glass render an expression of our private selves, a waking dream of the potentials of our digital worlds.

It is also interesting to consider that the smartphone springboard is not a space in which we spend our time. Its main value is as a construct that allows us to frame the subspaces in which we enter by launching apps, facilitating effective context switching as we move between apps, and providing a familiar menu of possibilities to which we return as we begin anew. It creates, for our minds, the base on which our digital experiences build.

As an interface that is highly structured and accessible, yet at the same time deeply personal and foundational, the springboard provides the most intuitive pattern for the parasocial profile in its two-dimensional form. In its most precise nomenclature, we call this Koji's *Link in Bio Launcher*.

By taking the shape of a springboard, the Koji Launcher is instantly familiar to any visitor; if you have interacted with my launcher, you already know how to interact with any other Koji launcher. This encompassing familiarity creates a highly accessible interface, while also leveraging the springboard's characteristic intimacy and personalization. Even though no two launchers look or feel the same—as no two individuals do—each retains its intuitiveness.

The Koji Launcher is not a private springboard that faces you, it is the digital expression of yourself that you present publicly, facing outward. As a foundation, it creates context for others to engage with your digital, parasocial self through new kinds of apps.

The Personal Menu

When it comes to the types of apps that live on the Koji Launcher today, they roughly fall into one of a few categories:

- Apps that facilitate what we term "identity-based commerce" using Koji's web-based in-app purchase SDKs, which include things like tip jars and other ways for supporters to show monetary expression, apps that provide similar functionality to existing services like Cameo, as well as apps like anonymous "Ask Me Anything" or "Dare Me [to do something]," where participation may or may not be gated by a monetary transaction, but the functionality of the app is still such that users *en masse* are engaging with an abstracted, transactional representation of the self;

- Apps that signal parasocial aspects of the self, like playlists, horoscopes, or relationship status updates;

- Digital flexes, like displays for NFT collections;

- Apps that facilitate the development and expression of communities around an individual, like message boards and guestbooks; and

- Apps that deliver novel, personalized engagements like games and other "fun" expressions.

As a matter of practical context, these apps open from the Koji Launcher in the same way apps open on a smartphone. They are "installed" by the owner of the profile and then, through Koji's innovative web-based app runtime, are instantly available to any user who visits the profile.

It is critical to understanding our thinking, however, that we do not fixate on the apps that exist today and what they do or how they behave. Rather, we must examine the structures and systems that gave rise to these applications and the infrastructure that supports the continued evolution and expansion of apps available as new modes of expression. We have been building Koji for nearly three years, and it is this larger dimension that has occupied the majority of our work and thinking.

Indeed, If we follow the assertion that a key component of participation in the metaverse requires curating and expressing a parasocial self, it is necessary that the tools supporting the practical development and projection of that self are unbounded such that they are capable of supporting a diverse and truly global audience.

Not everyone is a traditional "content creator" who might be interested in fulfilling Cameos or offering personalized advice. Nor is a global audience of individuals necessarily well-serviced by the social trends in vogue in America or the broader west. Each of us is different in our needs, and our parasocial expression changes over time as we grow deeper into ourselves and the world changes around us.

The only way to support such a diverse set of use cases, and, more importantly, to create a structure incentivized to continue evolving and searching for new patterns of novelty and meaning, is through an open platform; an app store. It is here that we nod to *Koji: Opportunity Analysis, Technical Overview, and Product Roadmap*, a 2019 document that outlines the foundational thinking behind the Koji App Store, centered around the core innovation of Subtractive Development, a novel theory of composability designed to radically accelerate the rate of evolution of new forms of software. This document is required reading for those wishing to understand Koji's core innovations, as well as the technical and implementation details surrounding those.

Koji Today

Today, the Koji Platform is used by nearly 100k individuals who would broadly be defined, in today's terms, as "creators." We believe that this audience, and its intersections with the space defined as the "creator economy," are in most need of tools that give them true ownership of their parasocial selves. Today, most of this audience's needs are colored by present-day thinking around commerce, transactions, and the like. The Koji App Store reflects this demand in its offering, supporting nearly 200 apps that creators can install to their public-facing springboards, the most popular of which mainly center around commerce and transactions.

Over time, this changes. As the definition of "creator" widens to include more and more individuals as part of our shift into the metaverse, their needs become broader and more diffuse. We believe Koji is positioned, from its foundations, to deliver on those needs and support this pillar of self-expression.

Economics

Exploring Incentives

We believe we have laid the technological foundations–specifically in delineating isolations and building toward meaningfully viable, battle-tested proofs of concept—to facilitate the development of our vision for a platform that supports parasocial expression in a scalable, sustainable, and equitable way.

Moving toward this vision comes with higher stakes than simply building another network, however. Rather than adding to the set of available spaces in which one can practice public expression (a relatively low-risk arena with little upfront investment required by participants), a platform that supports the parasocial self enmeshes its offering, by definition, with the very constructs by which individuals develop their identities.

It is thus critical to examine the economics and incentives that support this kind of a platform and to explore the ways in which individuals, their audiences, the developers who support them with apps, and the platform organization itself participate in this system. We have chosen to explore these tensions by constructing a model based around a theoretical KOJI token.

Before continuing, however, it is important to note that, like our definition of the metaverse at the beginning of this document, we are using the idea of tokens as a framing device in this section to explore the relationships between parties participating in the platform, concepts of ownership and decentralization, and other incentives. We do not intend the model that follows to be implemented literally, and will keep the discussion at a high level of abstraction so as not to inadvertently present something literal.

Trust Edges and Stablecoins

While creators and developers ultimately require true ownership in the platforms on which they rely to make a living, we also hold that, in today's world, the frictionless flow of money from audiences to creators is table stakes for any sort of meaningful adoption and success, and it is therefore necessary to introduce some elements of centralization and complexity as a stopgap pending more widespread consumer adoption of cryptocurrency.

Thus, when examining the primary financial relationship Koji facilitates—that between an audience and a creator via web-based in-app purchases (a simple example of which would be a tip jar app)—we believe the most accessible and effective mechanic is one where an audience member transacts with Koji in fiat currency, using a standard credit or debit card. Koji then terminates the fiat transaction in the same way that, in networking, a proxy might terminate a TLS request when it enters a private network. In this case, the purchaser enters into

a fiat-denominated transaction with Koji where Koji uses the fiat to issue a kUSD stablecoin. The corresponding kUSD is then transferred to the creator with whom the purchaser is transacting, and the transaction continues in-network from this point.

As part of a creator's relationship with the broader Koji platform, Koji provides and manages liquidity and exchange of USD/kUSD for registered creators. By bridging from fiat to cryptocurrency at transaction time, we allow audience members to seamlessly transact in the ways in which they are familiar, while providing the creator community with a seamless, Web3-enabled onramp that allows participation in the next layer of ownership, status, and upside within the platform.

Developers of Koji apps that provide for in-app purchases are able to specify transaction fees in addition to the platform fees, which are maintained via a governance token described in the following sections. Each of these fees is seamlessly paid at transaction time via kUSD.

We believe this point of centralization is required today in order to support any sort of meaningful adoption. Over time, as more and more transactions become crypto-denominated, this bridge becomes less and less important until it is effaced entirely. We mitigate the risks of this centralization by providing creators with ownership mechanisms in the underlying platform, giving the community ultimate control of these centralized mechanics.

KOJI Coin

The kUSD stablecoin is required to support a broad creator base, who today are most familiar with denominating their offerings in fiat and might not, for asynchronous offerings or short-term holdings, wish to be exposed to the potential volatility or unpredictability of the native platform token.

However, by seamlessly swapping kUSD for the native KOJI coin from within their platform wallets, creators gain access to a new mechanism for participating in the larger ecosystem and community. This umbrella token can be used for:

- Interacting with creators, either by staking to provide true verification and reputation or by trading against something akin to "creator coins," allowing individuals to participate in growth, development, and upside with other creators;

- Interacting with developers, whether by purchasing applications (à la carte or via monthly subscription) or by trading KOJI for "app coins," tokens that support ownership and governance of individual apps in cases where developers elect to allow this;

- Participating in platform governance via a pKOJI token; and,

- Interacting with the larger DeFi ecosystem, allowing creators and developers alike access to new financial products that allow them to more effectively leverage their creativity to build meaningful revenue, something currently unavailable to the overwhelming majority of creators and independent developers.

Supporting True Ownership

As mentioned in the beginning of this section, ownership is a critical tension when considering the shape of a platform that supports the expression of one's parasocial self in the metaverse. The apps that facilitate interactions, the reputation and authority of other users in the network, and the underlying platform governance are the three pillars that stand up a meaningful, healthy, and ever-evolving ecosystem.

If we follow the thought that a meaningful piece of the financialization of the metaverse as it relates to individuals will occur through the "apps" on one's parasocial profile, it is obvious that an equitable future involves those individuals being owners of these apps and not simply users.

By organizing the network around a token structure and facilitating the easy creation and decentralized exchange of "apps as tokens," we provide creators a means of truly investing in the apps they use. Additionally, as new apps and new developers emerge in the ecosystem, non-technical creators and other participants have the opportunity to fund those apps and teams, providing a scalable structure for bootstrapping the development of new apps and advancing the evolution of the app store.

The Next Generation of Software Development

The token-based relationship between creators and developers does more than simply provide creators with a new framework for understanding ownership of the tools on which their expression and livelihoods rely. This relationship, when examined in concert with Subtractive Development and Koji's broader developer innovations, gives rise to a radical shift in the economics surrounding software development: giving developers true ownership and equity in their work and frictionless access to a community of end-users within the context of a platform that centers innovation, novelty, and evolution.

If we paraphrase an aspect of Koji's mission, as defined through the previous sections, as to empower self-expression in the metaverse, the goal of the developer ecosystem is to create a structure incentivized to continue that search, constantly crafting new forms of expression for an ever-growing, ever-changing, and global set of participants—new instruments on which the mind can render its own reflection and share it with the world.

It is therefore most interesting to consider the ways in which the structure proposed in this section seamlessly supports the organization of capital and human resources, be that through what we today term DAOs, or, perhaps, through novel structures yet to emerge. Allowing developers and creators to connect directly and providing the means by which they can build tools that solve problems and explore new ideas represents, to us, the most elegant and intuitive structure for pushing the boundaries of human interaction in the metaverse.

Final Thoughts

The late Harold Bloom famously (and, we would be remiss not to note, controversially), credits Shakespeare with articulating and disseminating a concept of interiority and personality that gave rise to modern conceptions of self and mind.

Indeed, the bard's early modern period can, in one sense, be understood as a shift toward the intentional curation of the private self; a transition away from a society where the most meaningful component of one's identity was a publicly-accessible composition of one's self in relation to others (e.g., being primarily a "son or daughter of;" a member of a certain rank, class, or trade; a position in a household; etc.), and into a world where the private self—the individual and their personality—formed the core of being.

Forgive us for suggesting that we are in the throes of another such shift. The great wave of the metaverse is beginning to crest, and when the foam settles we will find ourselves on unknown shores. It is from this lens that examination becomes the tool by which we find stability and continue our journey.

Of course, Bloom invented his theory some four hundred years after Shakespeare's time. It is much easier to analyze these sorts of things with some distance. It may well be the case that nothing we have written here plays out in any of the ways we have described. Yet, praxis for the sake of praxis is one of the most fundamental human pursuits, and we hope the ideas we have explored in this document continue to inch us forward.