



UNIVERSITY *of* NICOSIA

Session 3

PFPs

META-511: Non-Fungible Tokens (NFTs) and the Metaverse

We are here

Week 3 →

1. What is an NFT?
2. Copyright and Provenance in NFTs
3. PFPs
4. Art NFTs
5. Generative art
6. Key considerations in the NFT space
7. Gaming NFTs
8. What is a metaverse?
9. Trends in visualization technology
10. Financing models for NFTs and the metaverse
11. Off-chain objects and the broader environment
12. A vision for the future

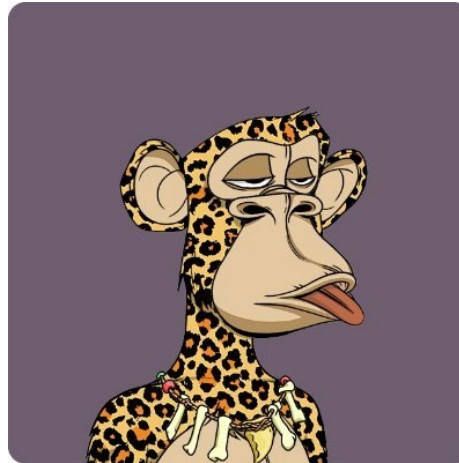
Today's focus is PFP NFTs

- PFPs and Virtual Identities
- PFPs as NFTs
- PFP NFTs: Quantitative metrics

PFPs will be covered in three separate sessions



Punk 6529
Oct 18, 1700pm EET



Garga (Greg Solano)
Oct 20, 2030pm EET



4156
Oct 24, 1540pm EET

This is an educational course only

- We will discuss various projects, individuals or NFTs in this course
- These projects, tokens or the individuals associated with them, are only referenced for educational purposes
- Nothing in this course should be taken as a recommendation to buy or sell an NFT or token or any other financial instrument or security
- More generally, cryptoassets are extraordinarily volatile investments. Please take care if you are buying cryptoassets
- The information provided during this session does not, and is not intended to, constitute legal advice.
- Instead, all information, content, and materials made available is intended for general educational purposes only.

Session 3: PFPs

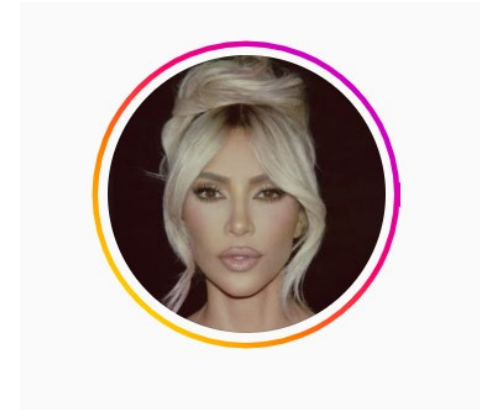
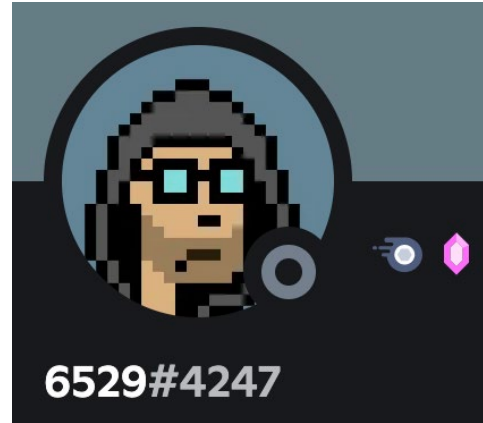
1. What are PFPs ?

What is a PFP?

PFP is an acronym for profile picture, a common feature of social media platforms



Hillary Clinton ✓
@HillaryClinton

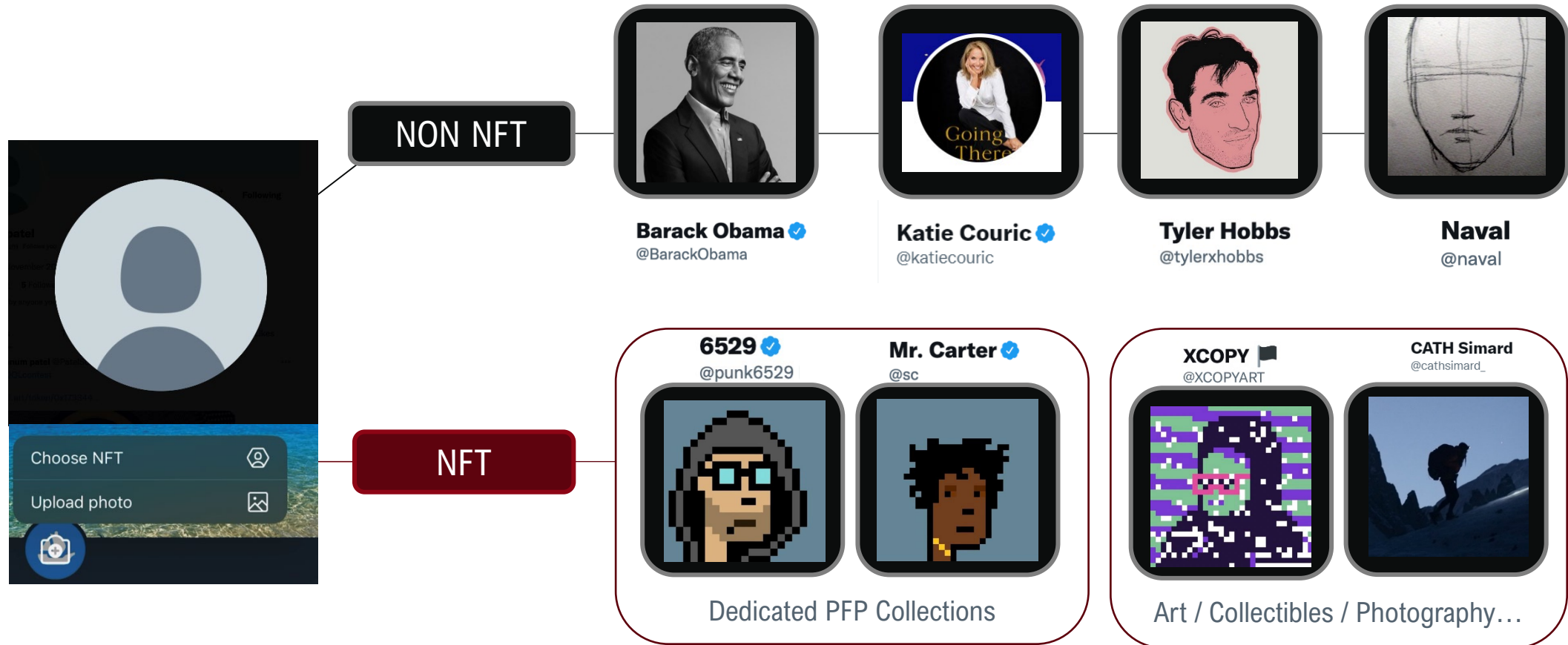


Bill Gates · 3rd
Co-chair, Bill & Melinda Gates
Talks about #books, #healthcare, #sustainability
Seattle, Washington, United States



What is a PFP?

What do people use for as a PFP? Anything!



What is a PFP?

PFPs predate the internet, but become much more interesting at internet scale

Hundreds Register for New Facebook Website

Facemash creator seeks new reputation with latest online project

By Alan J. Tabak, Crimson Staff Writer
February 9, 2004

When Mark E. Zuckerberg '06 grew impatient with the creation of an official universal Harvard facebook, he decided to take matters into his own hands.

After about a week of coding, Zuckerberg launched thefacebook.com last Wednesday afternoon. The website combines elements of a standard House face book with extensive profile features that allow students to search for others in their courses, social organizations and Houses.

"Everyone's been talking a lot about a universal face book within Harvard," Zuckerberg said. "I think it's kind of silly that it would take the University a couple of years to get around to it. I can do it better than they can, and I can do it in a week."

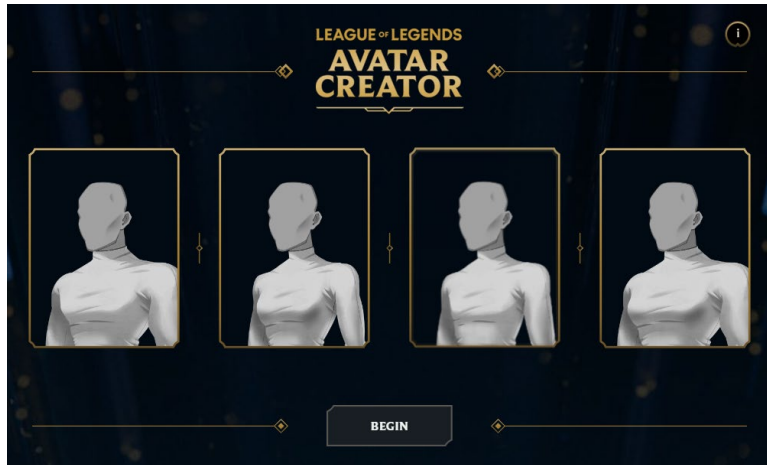
As of yesterday afternoon, Zuckerberg said over 650 students had registered use thefacebook.com. He said that he anticipated that 900 students would have joined the site by this morning.



Facebook was built to improve on the physical Harvard “facebook”

What is a PFP?

PFPs are a subset of a broader model of virtual visual identities



Avatars
(Gaming)



PFPs
(social media)

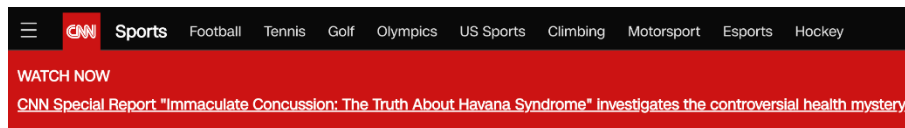
What is a PFP?

PFPs are about identity



What is a PFP?

PFPs provide insight into the user and the culture of their online community

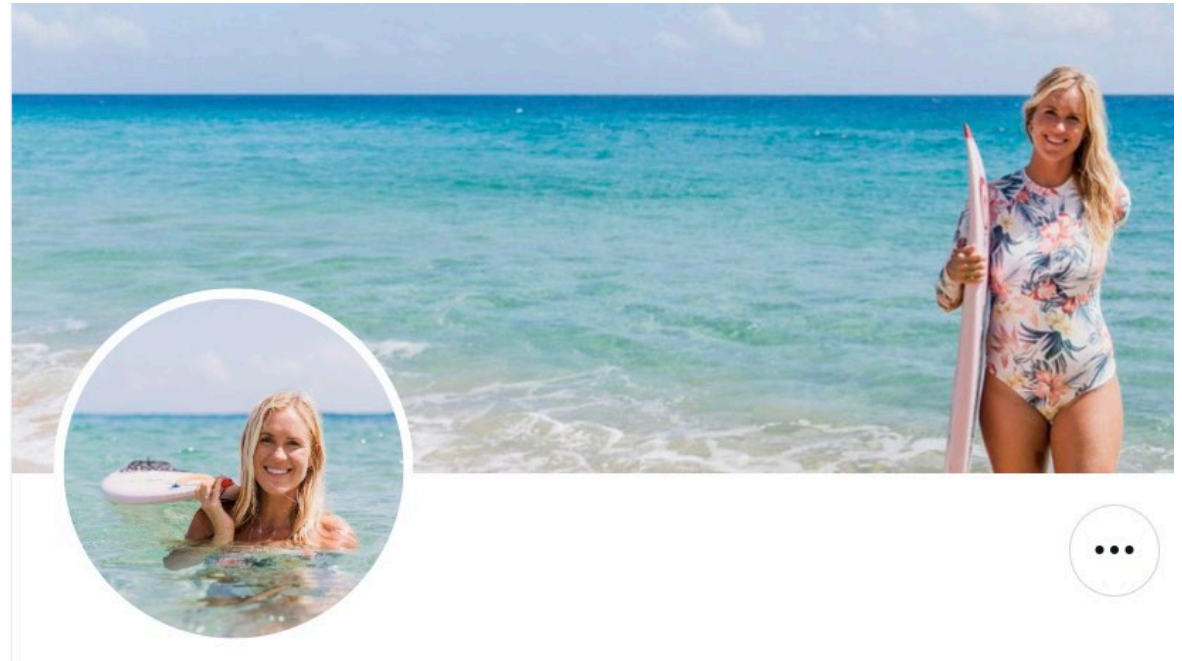


She lost her arm in a shark attack, but surfer Bethany Hamilton is living 'an unstoppable life'

By Graham Hill
Updated 10:31 AM EDT, Fri October 25, 2019



Bethany Hamilton
@bethanyhamilton



What is a PFP?

People can have multiple, possibly overlapping, identities

Professional Identity

Community Identity

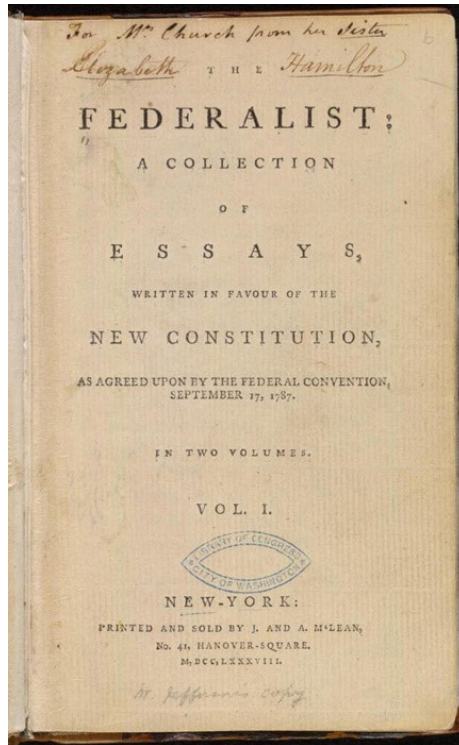
Avocational Identity

People have been shown to use between 3 to 5 different PFPs across different platforms

- Users' perceptions of each platform and the platform's audience impact how they present their online identity.
- The users have definite ideas about the types of audiences they attract on each platform and make conscious efforts to shape their depictions accordingly.

What is a PFP?

People sometimes use pseudonymous identities



- The Federalist Papers, in favor of ratification of The Constitution, were written by Alexander Hamilton, John Jay and James Madison
- The papers were published under the pseudonym “Publius”
- Pseudonymity may be used for various reasons:
 - To separate identities
 - To clarify messaging
 - To protect the author

What is a PFP?

Avatar / PFP effects are likely to be bilateral



3D characters taken from a study show that game players' performance is affected by the perceived characteristics of their avatar.

- Research done at the University of Nicosia shows interesting physical effects from virtual avatars
- Users of avatars demonstrated measurably more physical strengths in various tests, based on if their avatar had “stronger” characteristics

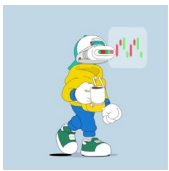
Source: [Aliens versus humans: Do avatars make a difference in how we play the game?](#)

Session 3: PFPs

2. PFP NFT Collections

Recap: Major PFP projects by License Type

Personal License Only



Invisible
Friends



CryptoPunks
(Before)



CloneX
(Murakami Drip)

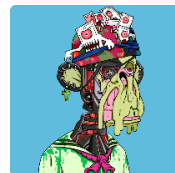
Commercial Licenses



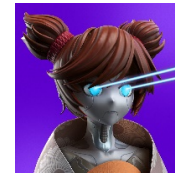
CryptoPunks
(now)



BAYC



MAYC



CloneX
(\$1M limit)

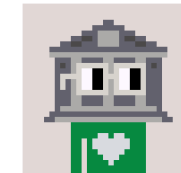
CC0 / Public Domain



mfers



Cryptoadz



Nouns



Moonbirds

Most PFP Projects Today Fall Into One Of These Two Categories

CryptoPunks began as generative collectibles, not as PFPs

- Collection of 10,000 NFTs **randomly generated** collectible characters based on a set of **traits** with proof of ownership stored on the **Ethereum Blockchain**.



- Originally **free to claim** in **June 2017**. Today, they range in price from approximately \$90,000 for the majority of punks to \$5M to \$10M for the rarest punks
- **Larva Labs** introduced the first collection **built-in decentralised marketplace**, including **royalty free trading**. Larva Labs kept 10% of the supply and the IP and **copyright** of the whole collection.

CryptoPunks are art? collectibles? PFPs?



RCS: CryptoPunks complicate the boundary between digital art and collectibles. Is this debate important to you and what do you consider the likely consequences of a rise in generative art projects?

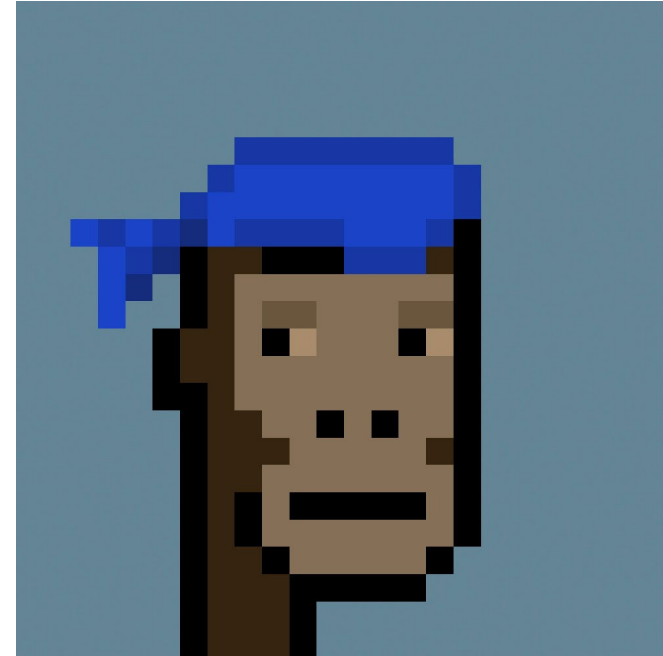
LL: It definitely does sit at that intersection. There's something interesting that goes on in the brain when it sees lots of little things that are "similar, but different." We don't spend our time worrying about whether people will classify it in one category or the other, but we do like to draw attention to the key aspect of Cryptopunks that is often forgotten and we think makes it very unique: Its built-in marketplace. It's an artwork (or collectible!) that comes with a built-in, always-on, decentralized, zero-fee marketplace. It makes it a very self-contained project, which we really love.

The use of CryptoPunks as PFPs was Emergent

NFT influencers started using CryptoPunks as PFPs



@gmoneynft
January 2021



@punk4156
February 2021

Social capital, social bond, self-image / branding



Social Capital

- 1 CryptoPunks are viewed as signaling “cryptonative” – that someone was either early enough or willing to sacrifice enough capital to send this signal

Social Bond

- 2 The use of a CryptoPunk NFT opens the opportunity to connect with like minded individuals. “Punk follow punk” and the punks discord group are networking examples

Self-image / Branding

- 3 Allows for a form of personal branding / recall and, if desired, pseudonymity

Yuga Labs introduced the “utility” era of PFPs



- Collection of 10,000 NFTs **randomly generated** collectible characters based on a set of **traits** with proof of ownership stored on the **Ethereum Blockchain**.
- Originally **0.08 ETH to claim in April 2021**, now they need to be bought at secondary market. **Commercial rights are granted** to the PFP owner.
- Yuga heavily emphasized utility:
 - Access to virtual clubhouse
 - Commercial rights
 - Physical events (parties)
 - Airdrops
 - A game/metaverse (Otherside)

Yuga offered additional benefits to token-holders

Physical Events



Airdrops



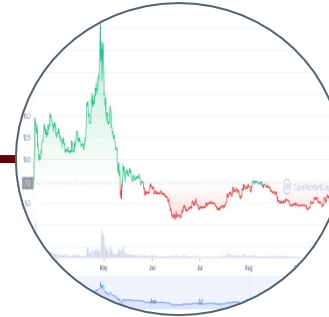
Bored Ape Kennel Club

By YugaLabs



Mutant Ape Yacht Club

By YugaLabs



 **ApeCoin**



Otherdeed for Otherside

By OthersideMeta

Many PFP collections are experimenting with “utility” models



Cool Cats NFT ✓



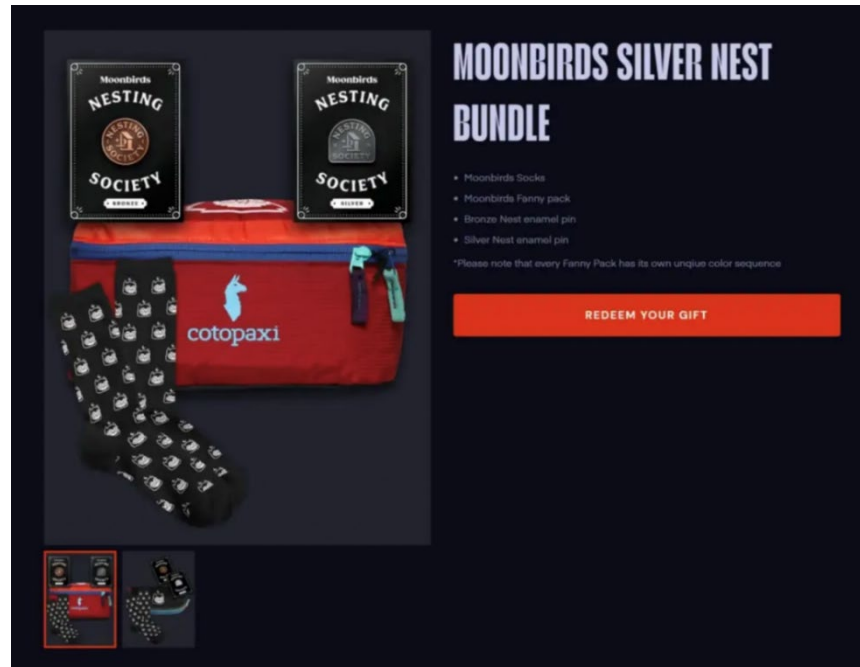
Doodles ✓

rektguy ✓



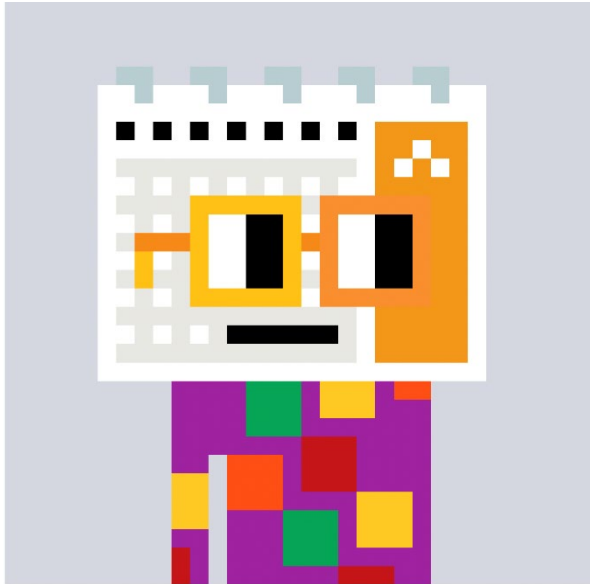
Moonbirds ✓

Many PFP collections are experimenting with “utility” models



- Branded Physical goods / **Moonbirds**
- Special NFT collections only available to NGT holders / **PROOF**
- Access to market reports / **Degenz**
- Access to services / **WGMI.io**

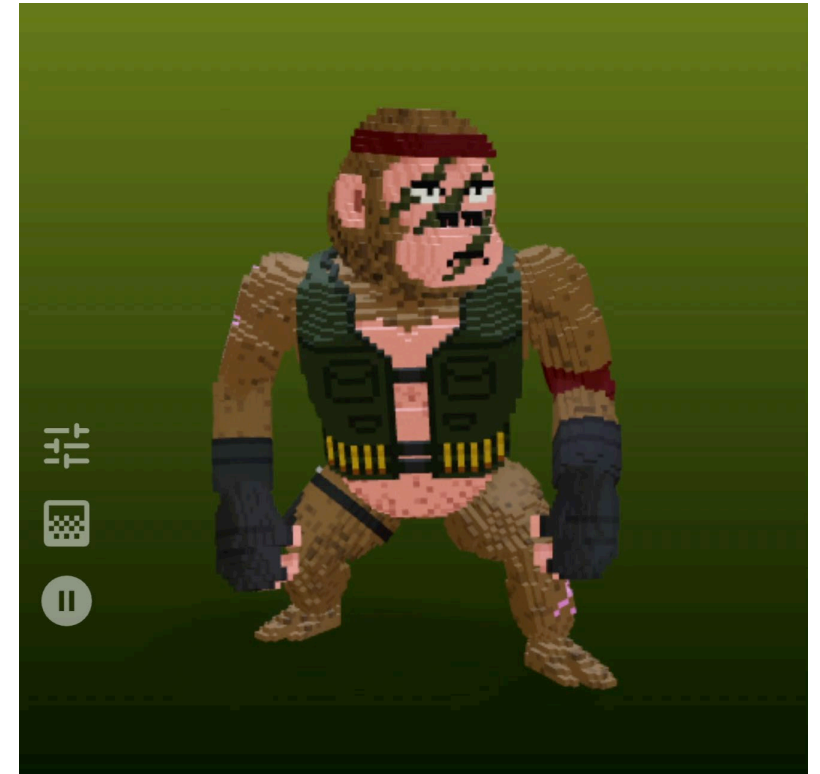
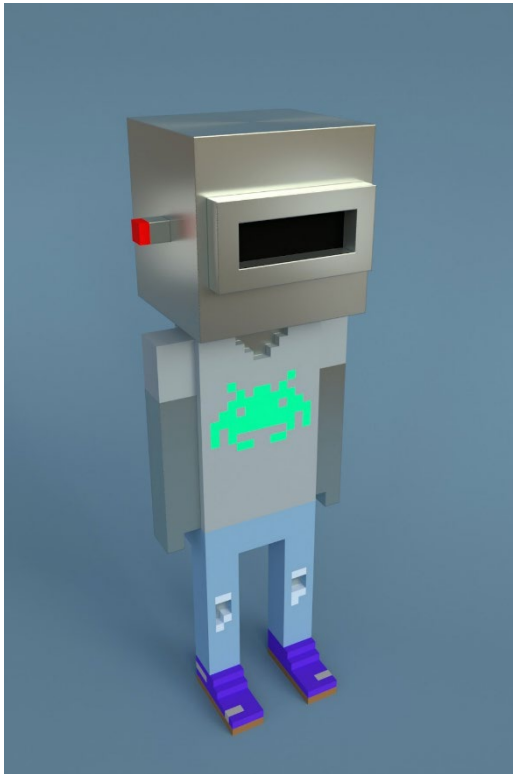
The Nouns PFP



- Distribution mechanism: Daily auction of 1 noun, the proceeds are sent to Nouns DAO treasury.
- Nouns artwork is on-chain and in the public domain / CC0
- Nouns are members of Nouns DAO. 1 Noun = 1 Vote.
- Treasury is controlled exclusively by Nouns
- Nounders (founders) receive one Noun of every ten
- Strong focus on open-source building

ONE NOUN, EVERY DAY, FOREVER.

3D NFT based avatar collections are in their infancy



PFPs as a publicly readable community database?

You can create applications for CryptoPunks without knowing anything about the holders

This feels like something very new, almost unexplored

Valuation

Why do people pay so much for a profile picture?

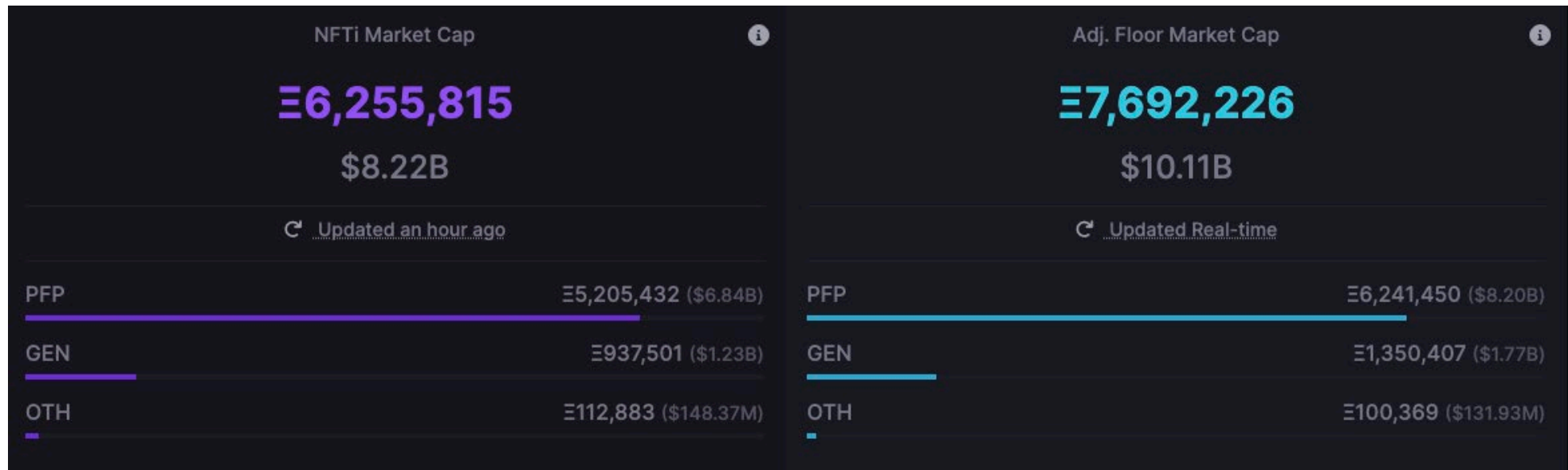
Key Outstanding Issues In PFPs

- Valuation – What is the “right” price for a PFP?
- Utility in PFP collections:
 - Does it mean anything?
 - Does it create securities legislation risk?
- Which licensing model will be more effective? Commercial licenses vs CC0 (public domain licenses)?
- Are PFPs communities or customers?
- Are PFPs are an art/culture field or a fast fashion field?
- What are sustainable revenue models for PFPs? Primary Sales? Royalties? Products and Services?

Session 3: PFPs

3. The PFP Market

PFP collections dominate NFT market capitalization



Source: NFTValuations.com

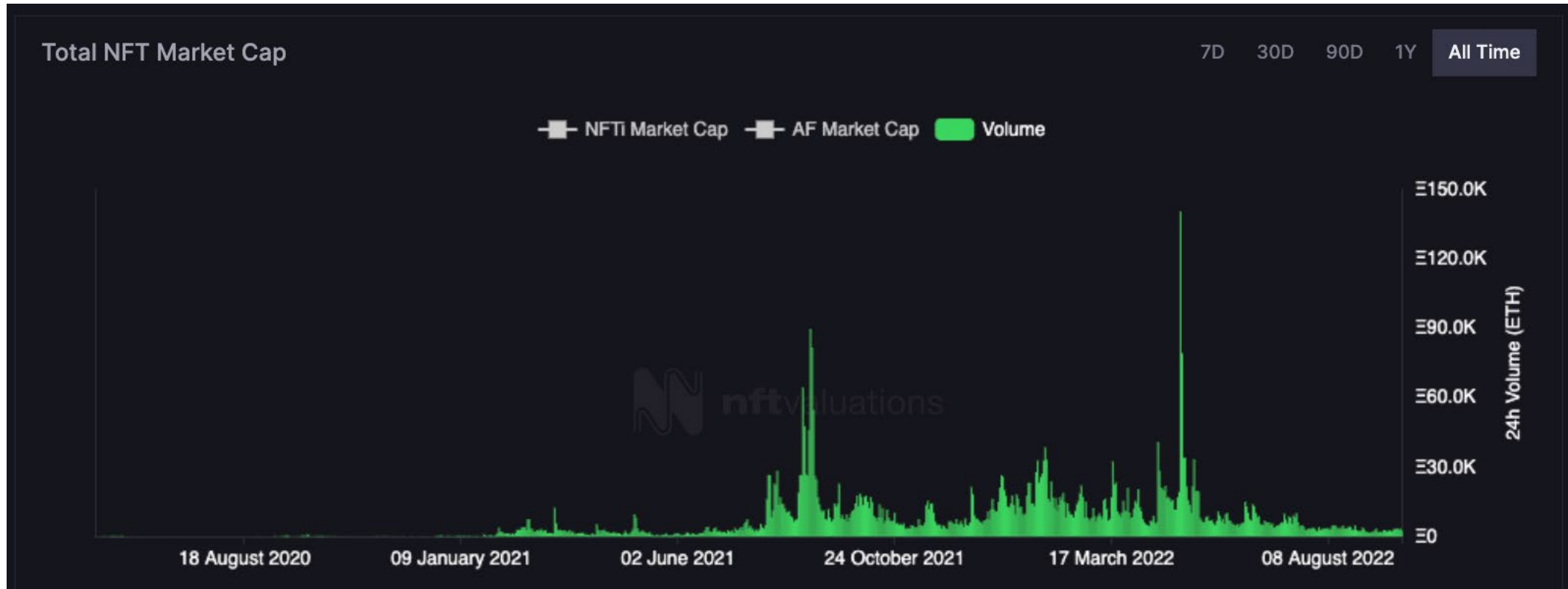
8 of the 10 collections by market cap are PFP collections

| | COLLECTION | NFTS | FLOOR | OWNERS | AF MARKET CAP | 24H | NFT MARKET CAP |
|----|---|---------|----------------------|-----------------|---------------------------------|--------------|--------------------------------|
| | 602 Collections | | | | Total £7,858,621 \$10.43B | AVG -0.2% | Total £6,702,150 \$8.89B |
| 1 | Bored Ape Yacht Club Yuga Labs PFP | 10,000 | £75.64 \$100,356 | 6,416 64.2% | £1,080,711 \$1.43B | -3% | £1,209,113 \$1.60B |
| 2 | CryptoPunks Yuga Labs PFP | 10,000 | £66.58 \$88,332 | 3,623 36.2% | £1,159,880 \$1.54B | +0.6% | £1,160,675 \$1.54B |
| 3 | Mutant Ape Yacht Club Yuga Labs PFP | 19,426 | £14.00 \$18,574 | 12,942 66.6% | £402,750 \$534.33M | -0.3% | £493,329 \$654.50M |
| 4 | Otherdeed for Otherside Yuga Labs PFP | 100,000 | £1.69 \$2,242 | 33,850 33.9% | £667,859 \$886.05M | -11% | £451,028 \$598.38M |
| 5 | CLONE X - X TAKASHI MURAKAMI RTFKT PFP | 19,411 | £8.25 \$10,945 | 9,657 49.8% | £324,085 \$429.96M | -4.3% | £245,144 \$325.23M |
| 6 | Chromie Squiggle by Snowfro Art Blocks Curated GEN | 9,675 | £12.25 \$16,252 | 2,724 28.2% | £190,927 \$253.30M | 0% | £196,695 \$260.96M |
| 7 | Azuki PFP | 10,000 | £11.72 \$15,549 | 5,030 50.3% | £220,472 \$292.50M | +6.7% | £183,751 \$243.78M |
| 8 | Autoglyphs Larva Labs GEN | 512 | £345.00 \$457,712 | 155 30.3% | £182,689 \$242.37M | 0% | £176,640 \$234.35M |
| 9 | Meebits Yuga Labs PFP | 20,000 | £3.05 \$4,046 | 6,581 32.9% | £145,392 \$192.89M | 0% | £147,634 \$195.87M |
| 10 | Moonbirds Proof PFP | 10,000 | £9.89 \$13,121 | 6,633 66.3% | £169,210 \$224.49M | 0% | £144,335 \$191.49M |

4 of the top 5 (and 5 of the top 10) collections by market cap are Yuga Lab collections (post their purchase of the Punks IP)

Source: NFTValuations.com

Trading volumes have returned to early 2021 levels



Source: NFTValuations.com

Session 3: PFPs

4. Conclusions

Takeaways from week 3

- PFPs are a subset of a broader model of visual virtual identities, providing insights user and the culture of their (possibly multiple and overlapping) online communities.
- PFPs may support user pseudonymity – interestingly, research shows that effects from PFP use may be bilateral.
- Most PFP projects today issue either commercial licenses or are in the public domain (CC0). Newer collections are experimenting with other models, such as utility.
- PFP collections can even be thought of as publicly readable community databases, supporting application creation without real knowledge about PFP holders – still an unexplored area.

PFPs remain at a nascent stage, with many outstanding issues:
valuation, utility, licensing model, revenue model, etc.

Further reading

○ Larva Labs:

- <https://medium.com/thedapplist/what-are-cryptopunks-a7428e0fd6e6>
- <https://www.larvalabs.com/blog/2021-5-3-1-1/introducing-the-meebits>
- <https://www.larvalabs.com/blog/2021-6-24-22-1/meebits-search-engine>

○ Nouns

- <https://nouns.center/>
- <https://nouns.center/history>
- <https://nouns.blog/best-cc0-nft-projects-to-look-out-for/>
- <https://nouns.blog/on-chain-nfts-and-why-theyre-better/>

○ Yuga Labs

- <https://en.ethereumworldnews.com/yuga-labs-founders-pledge-1-million-to-support-higher-education-in-their-hometown-miami/>
- <https://otherside.xyz/litepaper#what-is-otherside>
- <https://otherside.xyz/litepaper#ape-coin>
- <https://metaversal.banklessHQ.com/p/bored-ape-mutation-madness->

Further reading

- Moonbirds:
 - <https://nftnow.com/guides/a-guide-to-moonbirds-what-are-these-pfp-owl-nfts/>
 - The PROOF collective NFT - <https://collective.proof.xyz/>
 - Moonbirds DAO - <https://twitter.com/moonbirds/status/1576997306171170816>
 - <https://medium.com/@raffaelarein/moonbirds-and-proof-collective-5-learnings-from-hottest-thing-in-nfts-from-a-proof-member-4d99ec273ac2>
- Azuki
 - <https://cointelegraph.com/news/nft-project-azuki-launches-physical-backed-token>
 - <https://twitter.com/AzukiOfficial/status/1522292172074090496>
- Misc PFP-related
 - <https://metaversal.banklessHQ.com/p/create-your-own-pfp-collection>
 - <https://twitter.com/LeonidasNFT/status/1546873515487285251>

Further reading

○ Research Articles:

- Slater, Mel, et al. "First person experience of body transfer in virtual reality." PloS one 5.5 (2010): e10564. - [URL](#)
- Christou, Chris, and Despina Michael. "Aliens versus humans: Do avatars make a difference in how we play the game?." 2014 6th International Conference on Games and Virtual Worlds for Serious Applications (VS-GAMES). IEEE, 2014. – [URL](#)
- Yee, Nick, Nicolas Ducheneaut, and Jason Ellis. "The tyranny of embodiment." Artifact: Journal of Design Practice 2.2 (2008): 88-93. - [URL](#)



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Questions?

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