Chinese Cloud Players: How Proxy Play Develops From the Game Live Streaming

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Thesis submitted in partial fulfillment of
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ABSTRACT

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Abstract

The term "Cloud Player" (云玩家) has been widely used as a put-down of the alleged pseudo-players who actively engage in online game discussion but seldomly play games themselves, and game live streaming is considered as the major channel for those to indirectly experience games. This paper enquires into the identification and population of the so-called cloud players in China by investigating Chinese players' habits, consumption, and preferences in game and game live streaming through survey and interviews. The study showed that cloud players are an endogenic subgroup of the Chinese game community that has been marginalized and stigmatized. Cloud player as an identity is not a static but fluid and composite status an individual can opt for in experiencing one game at a time. To analyze the complex play mechanism of cloud players, a particular play conduct named proxy play by which gamers actively take on avatars of avatars and tune their levels of agency to varying play scenarios, is proposed and elucidated based on the established research on individuals' motivations for and engagement in game live streaming as well as reflective discussion of prominent theoretical frameworks in game studies such as the magic circle and the frame theory.

Dedication

This thesis is dedicated to my grandparents who have given me unconditional love, trust, and courage to keep up the good fight.

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1. Introduction

Today, electronic gaming is no longer an activity that's only pertinent to niche groups. It has become an integral part of people's cultural and entertainment life as well as a burgeoning and innovative industry that generates hundreds of billions of revenues annually (Wijman, 2021). In an era of digitization and globalization, the digital game industry witnesses the convergence of various cutting-edge technologies spanning Cloud Computing, Artificial Intelligence, and other communication technologies that fundamentally change the ways people used to interact and be connected to the world. The global strike of the COVID-19 pandemic since the end of 2019 with the attendant lockdowns and social isolation has further brought online games to an increasing amount of people and houses (Sport Hiatus, 2020). From the development of the earliest online games to the current building of the topical VR/AR/MR and Metaverse, the game industry, with its great potential and uncertainties, is considered by many countries to be a new fertile ground for technology and organizational innovations, industry upgrading, talent incubation, and even ideology promotion. China, as the world's current largest game market (newzoo, 2022) by revenue and number of players but also a latecomer in the game industry, demonstrates a unique trajectory of developing its own game territory.

1.1 Development of China's game market

From the earliest game arcade machines, ROM cartridges, CDs, classic household and mobile consoles (e.g., Xbox One and Nintendo DS), to PCs, and smartphones, and tablets later, the world game market has witnessed a stream of available game devices and also a gradual change in their popularities at the consumer market. With the large-scale application of 4G cellular network technology and the launch of smartphones with high-speed Internet connections (represented by the first generation of iPhones in 2007) and other mobile devices (Textedly, 2020), games are turning from being physically sold to being increasingly digitally distributed via online downloads (Entertainment Software Association, 2019). There has been a worldwide increase in the number of game users playing via mobile phones (Limelight Networks, 2021). Yet different from other major game markets in the world, such as the United States and Japan, that were dominated by game consoles and still retain a significant portion of game console users (PwC, & VentureBeat, 2016; Nielsen, 2017 INDEXBOX, 2022; Computer Entertainment Supplier's Association, 2020), the Chinese game market was steered towards a PC market in the absence of game consoles at its inception in the late 1990s. This particular game market structure was not only a mirror of China's low per capita disposable income relative to the expensive game consoles, chips, and discs at that time, but also a direct result of the 2000 state ban (Kharpal, 2014) on all foreign-imported consoles allegedly out of concern for violent games' detrimental impacts on the youth's mental

health. The policy barrier for foreign game console companies, mainly Japanese manufacturers, to enter the domestic market was accompanied by growing hardware counterfeit and software piracy: Xiaobawang, a Shanzhai (imitation product) of Nintendo's console was released (Jou, 2011) and consoles were smuggled (mainly from Japan, Hong Kong, and Taiwan) into China, cracked, and modified to play pirated and Chinese versions of games provided by the local merchants (CNBC, 2014). The grey market of bootlegged consoles and games remained even after the Chinese government's lift of the ban in 2014 (Briefing, 2015), largely due to a legal environment of years without sufficient protection of copyright and intellectual properties (IPs). However, this is more than a problem that is unique to China. Though hard to measure, digital rights management software and companies' monitoring of pirated game copies downloads via embedded codes report high rates of piracy around the world (Mugleston, 2021), which plunders a significant amount of revenues from game console companies that rely heavily on fees of software, services, and royalties rather than game consoles themselves.

The Chinese government initially exhibited a very low profile in cracking down on piracy of game consoles and online games for the sake of the development of indigenous game companies (which will be fully discussed later) and did not take much action till around the 2010s (Lai & Fang, 2008; General Office of the State Council, 2014; National Copyright Administration, 2020). However, criticisms arise that the piracy is

too enormous to tackle solely with one of the party state's customary tactics - ad hoc nationwide movements - and only a few cases have been dealt with as a deterrent to others. Many game companies have also been reluctant to put much effort to combat piracy due to concerns over marginal benefits and legal costs. Game companies are suspicious about the portion of the game pirates who would pay for a game legitimately if free illegal copies have been suppressed. Litigation against dispersed pirates is time-consuming and requires great financial and human inputs. Examples of extensive lawsuits against piracy in the motion picture and music industries (Danaher, Smith, & Telang, 2014) proved inefficient in the volumes of illegal downloads, and instead produced negative publicity for the industry. More non-temporary approaches are called for to systematically address piracy to establish a level market in China, as to which a few lessons could be learned from the technological, social, and educational means adopted by the international game industry in addition to the legal ones (Holm, 2014). Copy protection or digital rights management (DRM) software implanted in downloaded game's code or game discs is invented to prevent unauthenticated game execution on personal devices without activation confirmed by game companies' validation server. Nevertheless, it still has restrictions in practice: DRM manufacturers have to continuously update their toolkits to outstrip pirates who pay to get the code, crack the DRM, and then distributed the pirated version to the broader mass via piracy websites. Game companies could choose to increase the frequency of authentication

checks - rather than simply check the valid license at the initial install, but require re-checks regularly at log-ins - yet there's a trade-off between such protection and the rights of legitimate consumers. The extra steps and demand for a stable Internet connection to the validation server (that could itself suffers from crashes from time to time) even with single-player games will greatly impact users' play experience, which leads to a paradox that pirated versions may offer better game experience than official ones do. It also produces additional time and money costs to game developers who need to outsource the DRM wrapping to DRM manufacturers before releasing games. Therefore, more and more game developers take more flexible measures to motivate people to buy legitimate games, such as providing affordable and easy-to-access games by periodical limited sales (especially applicable to low-budget titles); simplifying game purchasing and downloading procedures via integrated distribution platforms (e.g., Steam and Origin); offering free patches and timely updates to legitimate gamers. Some indie game developers also actively engage in community education about copyright and resort to compunction and sympathy to build connections and other profiting channels (e.g., voluntary donations) with potential pirates through game forums and social media platforms.

The regulatory marginalization of game consoles, economic and technological status quo ante, as well as the absence of an innovation-facilitating institutional framework preventing copyright infringement made early Chinese game developers

divert their racecourse from the traditional pay-to-play and subscription models to a new business model originated from Korean massively multiplayer online games (MMOs) (Wolf, 2015). Under the so-called free-to-play (F2P) model, the basic game is offered free of charge for players to download with in-game purchases of bonus content, props, and accessories that will improve gamers' game levels and play experience. The Chinese game developers later further the model to a pay-to-win (P2W) model that makes it hard for players to level up and continue the game without consumption of virtual items and services. The F2P model is well compatible with China's large user base with a relatively low purchasing power where companies can generate immense revenues from in-game advertising and paid functionalities compared to one-time payments. Inspired by its origin, the strategy was largely applied in MMOs where synchronous interactions between players are only enabled by game companies' online servers, which easily exposed and eclipsed any pirated private server with suspicious malware. The new model was promoted and soon became the major business model of game companies in China. Even developers of single-player games followed the approach, incorporating paid downloadable content (DLC), official online communities with perks, and other online-exclusive functionalities like records of in-game achievement, badges, and scoreboards to reach more players and then motivate them to pay for a better game experience. Till 2006, 84% of newly released Chinese games adopt

the F2P model, and over 60% of the game revenues in China were estimated to be derived from the F2P-and-P2W model (SinaTech, 2007).

Though a wide coverage of Internet cafes provided Chinese players with economical access to the budding PC games as a complement to household PCs, Internet penetration in the early 2000s was still very low compared to other developed economies (World Bank, 2022). What underpinned the promotion of the new game model and the emerging domestic game industry was the Chinese government's ambitious scheme in the 2000s to build nationwide information & communication technological infrastructure, including expanding high Internet bandwidth access, through discriminatory policies that only companies with Chinese controlling interest can provide telecommunications services (Decree of the State Council of the People's Republic of China, 2000) and state investment to create a protected environment for telecommunication industry that was and is still dominated by indigenous state-owned enterprises (Ministry of Information Industry, 1999; Communication World Network, 2008). Meanwhile, with the spike in the game industry's revenues and its significant contribution to the telecom business (Sohu, 2003), a series of technology-boosting R&D programs targeting at game industry were launched: the 863 Program launched by the Ministry of Science and Technology announced game projects to develop example commercial games and standardized game engine with independent intellectual property rights for two-dimensional and three-dimensional dual applications, by

supporting corporate and state research on Chinese-language processing, human-computer interaction, and digital media technologies (China Youth Daily, 2005); China National Online Game Publishing Project (2004) was initiated by the National Press & Publication Administration (NAPP) to support online games produced by Chinese companies with independent IPs with taxation benefits and subsidies. It is noted that the 10-year project (NPPA, 2015) was not merely intended to promote Chinese culture, but acted more as a top-down measure to restructure the imbalance between indigenous and foreign game companies in the market share and industrial chain of the day (Zhang, 2003).

Despite its impressive performance in terms of revenues and an increasing market demand owing to its business model, the Chinses game industry in the 2000s was still confronted with a shortage of knowledge and technology that is the core block of a sectoral innovation system (Lee & Malerba, 2017). The Chinese government acknowledged that it was very unlikely for the indigenous game enterprises as latecomers to survive or even earn major ownership in a fully competitive market solely on their own. The game industry, as a service industry, in addition to the business model, still requires specialized innovative capabilities spanning aspects of programming (e.g., service stability, matching rules, and bug fixes), content (e.g., game mechanics and story setting), design (e.g., art design and user interface), and operation (e.g., community operation and event operation). In response to the local game

industry's need to acquire knowledge and technology, China leveraged its institutions and regulation to mobilize foreign and domestic actors to boost Sino-foreign coordination in game production. Between 2001 and 2002, NAPP and MII approved and enforced the Tentative Regulations for Internet Publication Management, requiring agencies working on Internet publications, games included, to apply for reviews and ISBN (International Standard Book Number) approvals from the provincial or province-level municipal Press & Publication Administration and NAPP (2002). The next year, the Ministry of Culture (2003) formulated and announced the Tentative Regulations for Internet Culture Management (later revised and updated in 2010 and 2017), defining online games as Internet cultural products and creation, production, reproduction, uploading, import, wholesale, retail, rental, and broadcasting of Internet cultural products as Internet cultural activities, of which commercial operators need to apply to MOC for the Internet Content Provider (ICP) license and, of which providers/publishers must apply to NAPP for the Internet Publication Provider (IPP) license that covers online game operation. Meanwhile, the Catalogue for the Guidance of Industries for Foreign Investment drafted by the State Planning Commission, State Economic and Trade Commission, and Ministry of Foreign Trade and Economic Cooperation (2002) specified that Internet culture and publication business is among what foreign investment was prohibited and foreign-controlled companies or foreign individuals cannot be registered in China as an Internet culture business unit to conduct online

game R&D and commercial operation. The combination of policies therefore forced foreign game developers that would like to enter the Chinese market to seek partnerships with Chinese domestic enterprises by giving the latter an exclusive authorization for game publication and operation in China (King & Wood, 2010).

In 2004, the leadership of NAPP even revealed that the state would set a quota system for game imports (Sina, 2004). However, even in the context of the favorable policies, the technology transfer process was far from homogenous or smooth as one would expect. Concerns over espionage and protection of IPR hindered a majority of Western competitors from conducting further cooperation with Chinese game enterprises except for franchising with strict control over core technologies (Suttmeier, 2004). Many Chinese game companies thereby only served as operators and distributors for foreign game developers, risking a considerable amount of down payment on imported games while having to pay a fixed share of profits to foreign game developers as royalties despite the games' market performance and enjoying little autonomy in the following game tweaks after the release. The impasse which would have continued trapping Chinese game companies at the lower end of the value chain was broken by the concentrated exportation and investment from Korean game developers (e.g., Nexon, Wemade, and NCSoft) which also gained experience from the Japanese and American predecessors and had particular edges over producing online games with avatars, graphics, music, narratives, and values that were both aesthetically and culturally

accustomed to the Asian and Chinese players. Korea, as an export-oriented economy with location and culture proximities, exhibited more interest in establishing joint ventures and cooperative venture funds with Chinese companies, setting Chinese R&D branches, and outsourcing games design and quality controls to Chinese artists and developers (Sina, 2004; SinaGame, 2006; SinaGame, 2015; TencentGame, 2016). The Sino-Korean cooperation in producing online games for Chinese and by Chinese not only generated considerable game revenues for Korea (KOCCA, 2016), but also offered Chinese domestic game companies learning opportunities in terms of game services, materialization systems, operation skills, server and network management from established overseas developers. Meanwhile, due to the increasing commercialization of game engines (WoLD, 2012), the relatively visible and thus imitable technological attributes of most electronic games, as well as the essence of games being cultural artifacts whose popularity depends on aspects like content and publicity as much as on technologies, Chinese game companies got to build the relevant production capabilities and soon acquire the essentials to produce their own games. At first, many of the produced Chinese games were more or less domestic clones or adaptations of internationally well-received games (KOCCA, 2009), a reflection of the poor copyright environment and Chinese game companies' limited R&D capabilities and opportunistic wariness in the face of possible market failure, yet which still helped Chinese game companies access market trends and user data to understand user preferences, market

trends, and to improve games. Moreover, with the upheavals of international geopolitics (e.g., Korea limitation order, “限韩令”, after South Korea's THAAD deployment) (BBCNews, 2017) led to dramatic changes in approved game import constitutes1 (Sina, 2020; U.S. Economic and Security Review Commission, 2018), intensified competition among local game firms as well as the capital accumulation of the Chinese domestic Internet service providers, several leading Chinese companies grasped the opportunities to develop their own cross-sector and transnational ecosystem of diverse entertainment offerings (including original games) and online services.

A common strategy for late-comer countries to catch up is to start process innovation on the basis of existing designs in the market and progress towards product innovation of a new design (Utterback & Abernathy, 1975). Having the experience of being isolated in the game production corner, some capitalized Chinese firms intended to further their vertical integration (Coe & Yang, 2022) in the game industry through digitalization of the game services offering process. This strategy was consistent with the fact that the F2P mode had been promoted among Chinese gamers, and individual PCs and Wi-Fi had been popularized followed by mobile phones with high-speed cellular networks 4G and 5G which all contributed to a thriving mobile gaming market in China (Game Committee of the Publishers Association of China, Sohu, & Gamma Data, 2021).

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1 More authorizations from the Japanese and U.S. digital games, such as Full Time Hunter, Naruto: A new generation, Live Football, Three Kingdoms, Call of Duty, FIFA Online 3, World of Warcraft, Minecraft, DOTA 2, and Counterstrike: Global Offensive.

Unlike the traditional PC and console games production networks where profits are allocated among hardware manufacturers, developers of game software, game publishers, game distributors, and B2C retailers, the rise of mobile game portals, owing to the popularization of app stores, directly distribute games on smartphones and tablets, which directly connects game developers to end consumers and reducing profit shares by hardware manufacturers and multiple intermediaries. This app economy and its "cord-cutting" ease for players rendered mobile gaming the most popular gaming channel (Statista, 2022). But what particularly offered Chinese game developers opportunities to integrate upstream and downstream was the special regulatory environment of Chinese Internet services: After Google pulled its business from China in 2010 due to reported cyberattacks and government censorship (Sheehan, 2018), a huge gap had been left for indigenous service providers in the Android mobile operating systems (OS) market given that Apple iOS users remained a small portion around 25% of the total mobile users in China (CIW, 2016; StatCounter, 2022). Chinese companies, including Internet companies, cellphone manufacturers, and telecom operators2 (AppInChina, 2020), took this opportunity well, developing over 400 domestic app stores as third-party distribution channels via Android open-source

2 Major Chinese App Stores include Tencent My App Store (应用宝), Huawei App Market Store (华为应用市场), 360 Mobile Assistant (360 手机助手), Oppo Software Store (OPPO 软件商店), VIVO App Store (vivo 应用商店), MIUI App Store (小米应用商店), Baidu Mobile Assistant (百度手机助手), Anzhi Market (安智市场), China Mobile MM Store (MM 应用商场), PP Assistant (PP 助手), Sogou Mobile Assistant (搜狗手机助手), HiMarket (安卓市场), Wandoujia (豌豆荚), Samsung App Store (三星应用商店),and Lenovo LeStore (联想乐商店).

(Nativex, 2021), among which MyApp by Tencent enjoys the biggest market share (26%) and highest user penetration (BusinessofApps, 2020). It is noteworthy that Tencent among all the game companies took the lead in the procedural engagement of being a game developer as well as a game distributor within the game production network. In this way, Tencent saved itself about 50% of its game transaction revenues that should have been paid to distributors and at the same time earned commissions from its own transaction platform (Sina, 2019). Meanwhile, about 18000 game companies acted as both game operators and publishers, independently or jointly receiving game operating and publishing approvals (Paper, 2020).

Efforts by the top Chinese Internet firms of furthering their vertical integration in the game industry also lie in their continuous attempts to tap into foreign game industries and markets. Having seen that design was the core know-how of game development and also still the most challenging chain for many local competitors, major capitalized Chinese game firms, such as Tencent, NetEase, and Perfect World, not only invested heavily in their in-house research, but also started to further intensive overseas purchasing of IPs, equity stakes, as well as mergers and acquisitions (CB Insights, 2018; PC Gamer, 2020; Polygon, 2022). They also switched their roles from local partners with foreign game investors to active investors and exporters in overseas markets by setting up overseas offices, producing and selling localized games initially to Asia, and gradually to European countries and the United States (Ren, 2020; Huang, 2021). Till

2022, the major Chinese game firms were catapulted to the forefront of the global game companies (AppMagic, 2022), generating huge amounts of revenues worldwide. These offshore R&D funding and investment were also fueled by the Chinese government's soft-power building strategies (Li, 2009) and policies of cultural export: State Administration of Press, Publication, Radio, Film & Television openly encouraged domestic game enterprises to "go out" to participate in foreign direct investments (FDIs), international operation services, and exporting IPs, not just for mature markets, but also for emerging or even temporarily blank markets (gov.cn, 2015). The "12th Five-Year Plan" for the development of the press and publication industry formulated by NAPP during the national Twelfth Five-Year Plan for National Economic and Social Development emphasized supporting enterprises of online games, animation, and e-books to open up overseas markets and launched projects such as Chinese Original Online Games Offshore Popularization Plan, International Marketing Channel Expansion for Chinese Publications, and Overseas Development Support for Key News Publishing Enterprises (ZOL, 2010; gov.cn, 2011).

As more and more Chinese game firms become aware of the network effect of the platform economy (Srnicek, 2017), they attempt to conduct horizontal integration of building a cross-sector and multimedia innovative ecosystem of digital cultural products and services to further consolidate their advantages in the game industry and expand their business landscape. Perfect World entered motion picture and television with its

affiliation Perfect World Pictures early in 2008, taking on the production and distribution of movies and TV shows. It has signed cooperation agreements with several international film producers including Universal Pictures (CISION, 2016). NetEase created its email, literature, music, news, dictionary, e-commerce, and live streaming lines (Sina, 2022). The cross-subsidization of free and paid services can attract traffic to key platforms (often with paid content). Tencent also established its digital content ecosystem covering online games, game live streaming, online streaming, literature, animation and comics, sports, e-sports, music, and news (Tencent, 2022). By leveraging the interplay between digital content, these Chinese companies greatly expand their IP resources and collect valuable consumer feedback that helps developers improve the design quality. In addition to the content conglomerate, Tencent invented its mobile payment channel WeChat Pay (微信支付) embedded in WeChat (the most used one-stop social media in China) (Startup Info, 2021), online payment system TenPay (财付通) as well as virtual currency Q Coins bundled with QQ (another popular Chinese instant messaging app that could also act as a referral channel to games) (DragonPost, 2020), all of which could have a unified registration system that is linked to Tencent games which optimizes user information management and greatly simplifies in-game payment and other in-app purchases. These mutually-reinforcing cultural innovative conglomerates are in line with and supported by the Chinese government's promotion of converging pan-entertainment industries, as a part of the strategy to secure the national strength in

cultural development. The China Media and Innovation Park (2022), approved by the Ministry of Science and Technology and the National Torch Program, was constructed in 2005 to effectively integrate land and education resources with the government's funding of over two billion RMB and infrastructure offerings. The Shanghai government invited Microsoft China to jointly build the Mobile Game Incubator Base, providing entrepreneurs with free offices, facilities, one-stop equipment, business funds, and supporting services such as registration, tax management, approval application, technical training, etc. (Tencent, 2014). The Beijing government constructed Digital Entertainment Zone, Online Game R&D Base, Online Game New Tech Application Center, and Smart E-Sport Hub with leading indigenous game companies, supporting game technology industrialization with comprehensive research, talent, funding, and licensing aids (Tencent, 2010; Beijing News, 2020; YNET, 2020). The specialized game industry configuration of flagship companies and startups alongside other subsidized high-tech parks has facilitated industry partnerships and investment while maximizing economies of scale and the clustering effect.

1.2 State regulations on the Chinese game industry

Looking back to the development and innovative path of the Chinese game industry, the Chinese government has taken a significant role as an investor as well as a gatekeeper in various facets of the game economy building by a) improving the nation's fundamental productivity represented by telecommunication infrastructure and

technologies to serve as the key enabler of emerging digital industry; b) implementing protective industry and development policies to prevent local game companies from foreign competition while boosting transnational technology transfer to upgrade indigenous enterprises; c) giving constant policy benefits and guidance to propel industry convergence, building innovation system, increasing game and other culture industry's competitiveness in the globalization. Notwithstanding, the techno-nationalist paradigm has also set handicaps to the long-term development of a creative industry like the game industry. As the Chinese game industry expands with growing market demands, not only are foreign game companies being restricted by the state's strict licensing system, but Chinese game companies, especially the medium and small game companies and independent game developing teams, also suffer from the bureaucratic paraphernalia and its inefficiency. It takes at least 6 to 12 months for a game's complete application documents to go through six steps of review by different administration departments and staff and to get an eventual license approval and the publication number ISBN (or not) from NAPP (n.d.) with the prerequisite that the operation and publication agencies have got ICP and IPP from MOC and NAPP respectively. Even the administrative organs have divergences of opinions over their jurisdictions: Though the General Office of the State Council stipulates that MOC is prescribed to supervise the planning, building, and transaction of the game industry as well as game content review whereas NAPP is in charge of the management and approval of game publishing, the

review process of NAPP also involves a lot of content reviewing. The release of the well-known World of Warcraft in China was postponed due to MOC's ultra vires accusation of NAPP's review decision on the game (Sohu, 2009). Unlike the U.S. Constitutional protection of most game content as freedom of speech and state autonomous judgment criteria of game violence and pornography (chinalawinsight, 2010), China's regulatory regime deals with much more general and extensive content censorship, restricting any violation of national unity, sovereignty, security, interest, and ethnic unity, social morality, social stability, and laws, as well as contents of evil religions, superstitions, rumors, obscenity, gambling, violence, crime-abetting, insulting, slandering, and so forth (NAPP, 2020). In response to the broad (and inevitably ambiguous) censorship guidelines and rising social concerns over shoddily-produced games, the authority on one hand accelerates weaving the scrutiny web of state by forming an Online Game Ethics Committee composed of game experts and scholars (Niko, 2018), and piloting a new grading system evaluating game values, original design, production quality, cultural content, and development stage (Niko, 2021a), on the other hand, presses enterprises for self-regulation, including introducing and an aged-based game rating system (Pan, 2019; Niko, 2019a), upgrading the anti-addiction system[3] for gamers under

3 The anti-addiction system was implemented since 2007, initially allowing a maximum of three-hour "healthy" gaming time and two-hour "fatigue" gaming time, by which in-game achievements would be reduced by half over 3 hours and be zero over 5 hours, then changing to a maximum of 1.5 hours per day on weekdays and a maximum of 3 hours per day on holidays. On 30th August 2021, NAPP stipulated that

18 (NetEase, 2007; NAPP, 2019; Reuters, 2021) along with universal real-name authentication (Kan, 2010 Bischoff, 2015; Lee, 2017; Cyrill, 2019; Gravelle, 2020) to curb gaming time and consumption by minors, which imposes both technological and procedural challenges to game developers and raises concerns over access to private data and data security. In 2018, a regulatory reshuffle[4] in the game reviewing administration caused a nine-month freeze of game licensing approval - the former authority halted reception or approval of games' publishing applications - whose ripples led to mass bankruptcy and layoffs in the game industry (CAIJING, 2018; NEWBILLION, 2019; PAPER, 2020). Though the reviewing and approval process was claimed to be resumed on 19th December 2018 (VERGE, 2018), the following years actually saw continuous freezes (SCMP, 2021), with NAPP's affirmation of limiting each year's number of games licensing approvals (Niko, 2018). The effect of the restriction on checking game hype and improving game quality is yet to be seen.

While the consecutive suspensions of game license approval (PAPER, 2019) and drastic decline in the annual number of game approvals since 2018 (Tencent, 2022) push

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gamers under 18 can only play online games for one hour per day between 8 pm and 9 pm on Friday, Saturday, Sunday, and legal holidays.

4 In March 2018, the 13th National People's Congress decided to disband the SAPPRFT and restructure it into National Radio and Television Administration (NRTA) while transferring the former's jurisdiction over the press and digital publication to the Publicity Department of the Central Committee of the Communist Party of China (CCPPD) (China.com, 2018). A new organ under the direct administration of CCPPD called the National Administration of Press & Publication (NAPP) was formed later on April 16th.

many game developers to hedge their bets by releasing games via oversea game platforms, the state is also tightening their assimilation of these channels. In 2020, the Chinese government requested Apple to take down unlicensed paid games or games with in-app purchases from the App Store China mainland which had been a grey area since the 2016 Notice on the Administration of Mobile Games Publication Management came into effect, officially requiring publication numbers for mobile games (KUHNS, 2020). With the opening of Steam China which requires ISBN for games to be listed on the platform (SteamDB Team, 2021), Chinese consumers are worried that Steam, the uncensored enclave, would also be gone — the limited onshore version only sells 53 games while the global storefront has over tens of thousands of games (Fortune, 2021). This not only breeds illegal bidding and appropriation of ISBNs as well as hoarding for speculation (CAIJING, 2018; mygamez, 2020), but also banishes a considerable amount of high-quality indigenous and foreign titles from the Chinese market.

As the Chinese game industry gradually transitions from the incipient haphazard growth spurts to sustained and synergetic development, the progressive improvement of rating and legal systems can help the government delegate and divert more imperative industry supervision from content screening to malign market competition that inhibits creativity, such as piracy and oligopoly. The prevalence of copycat games designs along with duplicated elements, and characters (Law Prof Blog, 2016) is intensified by the fragmentation of increasing app stores and distributing

platforms in China, which makes imitations hard to track or remove and market potential unlikely to be fully realized. Meanwhile, over-expansion of monopolistic flagship game/Internet companies taking the lion's share of the market through the platform economy, even in the cultural and industry clusters, drives out middle and small game studios, breeds induced overconsumption that backfires the games, assembly-line production for quick bucks accompanied with lowered average employee wages. The hyper-centralization of production capitals and channels by IT giants as well as market speculations easily make the industry depreciate originality, creativity, and diversity which are real assets in cultural industries. The predicament was aggravated by the state's ambivalence in gaming as a whole: On one hand, the authority recognizes the economic productivity as well as cultural values of games in connecting with the public, especially the younger generation (199IT, 2019), and therefore intends to orient game industry to operate in the orbit of state values and even serve the state agendas[5] (Sina, 2005; Moore, 2013; Gamersky, 2016); on the other hand, it exercises heavy-handed policies on gaming and attempts to keep the youth from games while investing heavily in e-sports industry and tournaments (Global Times, 2021; Horwitz & Yu, 2021). Education about game art and designs, and gaming as a nascent career, industry, and a way for people to explore self-identities, gain agency, and interact with

5 For instance, Shanda developed a series of nationalistic games named Chinese Heroes, Resistance War, and Unsheathed Swords. Communist Youth League games produced Re-Walking the Long March to memorize the 80th anniversary of the victory of the CCP's Long March.

the world (Gee, 2014) is insufficient in the education system while internet and gaming addiction treatment boot camps with electroshock therapy, confinement, and physical abuses are rampant nationwide (BBC, 2017; Ives, 2017; Westcott, 2020).

1.3 An emergent segment in China's pan-entertainment industry convergence

As China's game industry gets on track with the evolvement of its R&D, operation capabilities, and domestic information and communication technologies, the Chinese game market becomes increasingly diverse in terms of game genres, game payment structures, and game population. Game genres on PC and mobile ends represented by MOBA[6], STG[7], and RTS[8] that involve massive real-time combats with balanced in-game resources and of which players rely on their game techniques and strategies instead of purchased weapons and resources to gain advantages and victories in the game, have proved to gain vast popularity among Chinese game players (Rakuten Insight, 2022). These fair competitive games that value intensive action-filled and fast-paced confrontation test players' strategic thinking, spatial awareness, and reflexes,

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6 MOBA (Multiplayer Online Battle Arena) games, originated as a subgenre of RTS (real-time strategy) games, set two teams of players compete against each other to achieve a typical objective - destroy their opponents' ultimate base - on a predefined battlefield where each player controls one character with a set of capabilities that cooperates with their teammates and improves along the paths heavily guarded by defensive structures.

7 STG (Shooter Games) are a subgenre of action video games where the avatar controlled by a player must defeat the enemies, either NPC characters or avatars played by other players, using shooting, projectile, and missile weapons with other defense tools and accessories a player is given or collects and upgrades in the game.

8 RTS (Real-time strategy) is a subgenre of strategy video games that players pitched against each other to gather resources, build construction, manage military and non-military units, and develop technologies simultaneously to secure their own territories and/or destroy their opponents' assets.

which quickly give rise to regular e-sports tournaments organized by game manufacturers and operation companies where official game teams or clubs compete under standardized match systems, rules, and procedures.

Soon around 2010, with the state's gradual recognition of e-sports (7-YOUNG, 2022), game live streaming emerged as a new technical and systematic combination of video websites and voice chat apps (iResearch, 2020) in response to the rising needs to stream online and offline e-sport events (*ANNUAL REPORT*, 2020). Multiple interactive functions in various forms such as real-time text chatting, bullet chatting[9], voice and video chatting, membership subscription, online gifting, and fan clubs were step by step developed and added to the live streaming channel. The influx of capital investment from major domestic game distributors and video platforms in the following decade not only boosted the independence of vertical game live streaming platforms, represented by Huya (虎牙) and Douyu (斗鱼), from their parent companies (Huajing Industry Research Institute, 2022a), but also brought the horizontal business expansion of video content providers and, gradually, convergence of previously isolated streaming networks and long and short video sharing channels: Huya and Douyu have developed video sharing section to encourage additional user-generated content (UGC) of video games and consolidate player communities; Medium-to-long video sharing platforms

9 A time-sync commenting function that enables viewers to send context-based comments that fly across the screen like bullets.

like Bilibili have developed their live streaming business that is complementary to the platforms' original video content; Even social media, especially those short video sharing ones that were born with streaming technologies in recent years, such as Douyin and Kuaishou, are committed to incorporating game live streaming into their content ecologies. Therefore, in addition to vying for broadcast rights for e-sports tournaments (*ANNUAL REPORT*, 2020) to attract the audience in match seasons and signing popular e-sport players as one platform's exclusive streamers and commentators, game live streaming platforms continue to live stream massive gaming contents produced by amateur game streamers, either individuals or ones contracting with MCNs (Multi-Channel Networks), and offer all types of game recordings and edited videos to reach and retain more users. Till nowadays, though under constant supervision and regulation by the state (e.g., copyrights and anti-monopoly issues) like the traditional game segments (sgpjbg.com, 2022), China's game live streaming overall has been experiencing consecutive rapid growths in its user population, of which the rate peaked after the outbreak of the COVID-19 pandemic in 2020, while China's gaming population starts to enter a stable retention period (Huajing Industry Research Institute, 2022b).

A new industry chain driven by marketing sponsorship, advertising, and gifting, is thereby constructed where game developers act as game content copyright holders who have the rights to authorize and set streaming rules for their game content, live streaming platforms serve as the technology and community organizer who provide a

venue for spectatorship and interactions, and streamers and MCNs participate to create PUGC (Professional User-Generated Content) that the game live streaming audience directly consume. Questions naturally arise: What is this new intra-channel virtual experience involving personalized gameplay feeds, connected playing-watching engagement and social interactivity that game live streaming participants indulge themselves in? Is that just spectatorship or does that count as gameplay? How does it influence the gaming community and how do we analytically and culturally understand these changes for gameplay as an experience whose demarcation is being constantly challenged? This paper proposes a composite concept of *proxy play* by inquiring into the so-called Chinese "Cloud Players," an active group of participants in China's online game exchange channels represented by the game live streaming communities and game forums, but also a marginalized and stigmatized group in the broad Chinese player community.

2. Who are Cloud Players?

2.1 Origin & Conception

As the word suggests, the appellation "Cloud Players" consists chiefly of two elements, *cloud* and *player*. The word cloud (Chinese character: 云) has appeared in China's numerous literary and artistic works, from poems, paintings, to ballads, since the ancient years as a nature imagery. Under the influence of the nature outlook in the Taoist and Buddhist culture, the Chinese people have entitled the ethereal and volatile cloud in the far-fetched sky with symbolic meanings of an illusory mentality in contrast to the tangible and grounded secular reality and a disembodied fantasy that easily turns into the void. In the game context, the lexeme cloud implies that the subject is an inauthentic and phony game player who usually jumps on the bandwagon after a game become popular online, designating the ways these "players" experience games rely on the Internet and cloud services: Instead of purchasing, downloading, or trying games on their own devices, they get their game knowledge from keeping track of online game live streams, videos, and other secondhand information shared by others (Moegirlpedia, 2022). Such indirect way of experiencing a game tends to be considered as non-play by a game's core players and thereby coin and use "cloud players" as a derogatory nickname to address the former, even some of whom seem to display a level of game knowledge similar to the "real" players'. The Chinese character 云 is also commonly used as a verb in the traditional Chinese language, meaning saying, talking. One stereotype of cloud

players is that cloud players indulge in empty talk but play nothing themselves, whose speech therefore cannot be trusted. People who are labeled as cloud players get stuck with judgments of being "windbags" that blindly follow suit to show off, "freeloaders" that usurp game content, or "armchair generals" that unconsciously give misleading suggestions, and thus lose their legitimate voices in the game community and on social media. To understand the seemingly rigid identification and hierarchy of being a gamer, we need to first figure out what composes gameplay.

Huizinga (1938) first coined the notion of the "magic circle" in his book Homo Ludens, as one of the listed metaphors for "play-grounds":

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play and ritual, so the "consecrated spot" cannot be formally distinguished from the play-ground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart. (p. 10)

The term occurs only three times throughout the whole chapter and was not elaborated as exactly as in its current application. Yet still, despite a discreet concession that play-grounds can be "materially or ideally" demarcated, the inventory of rhetorical

devices in the context does, more or less, point to the boundedness and distinctiveness of play whose vehicle is often entangled with the physical arena. As Huizinga himself defines spel (play/game in Dutch):

> [Spel is] ... a free activity standing quite consciously outside "ordinary" life as being "not serious" … It promotes the formation of social groupings that tend to surround themselves with secrecy and to stress the difference from the common world by disguise or other means. (p. 13)

This orientation was then absorbed and specified by Salen and Zimmerman (2003) who proposed the magic circle as shorthand for the idea of "a special place in time and space created by a game" (p. 114) in their book Rules of Play: Game Design Fundamentals. While it is noted that Huizinga somewhat intentionally cultivated clashing points of view as an embodiment of his poetic methodology to avoid a dogmatic ideology but generate knowledge widely - which makes his work susceptible to hermeneutical debate (Daniel-Wariya, 2019) - Salen and Zimmerman set out that the concept's connotation is in line with its diction:

> The fact that the magic circle is just that - a circle - is an important feature of this concept. As a closed circle, the space it circumscribes is enclosed and separate from the real world. As a marker of time, the magic circle is like a clock: it simultaneously represents a path with a beginning and end, but one without beginning and end. The

magic circle inscribes a space that is repeatable, a space both limited and limitless. In short, a finite space with infinite possibilities. (p. 114)

Their take on the term here is explicit and composes what is now generally referred to in game studies: a magic circle designates a formal border of the game as a special space-time construction of irregularities and infinities that circumscribes the boundaries between the play world (Riezler, 1941) and the ordinary world. Salen and Zimmerman instantiate a mixed perspective of Geertzian understanding of cultural acts and formalism: whereas toy-play out of casual interactions has a "fuzzy and permeable boundary" between the state of playing and not playing, such ambiguity does not pertain in gameplay since "the game takes place in a precisely defined physical and temporal space of play" where "the activity is richly formalized" (p. 114). They hold that the magic circle generates a clear beginning, a middle, and an end marked with quantifiable outcomes of gameplay and allows voluntary entry and exit of players. In further explaining the autonomous initiation, Salen and Zimmerman foreground that the territory of gameplay is governed by dedicated rules which undergirds the novel meaning-making process in the artificial world: "within the magic circle, special meanings accrue and cluster around objects and behaviors. In effect, a new reality is created, defined by the rules of the game and inhabited by its players" (p. 115).

As a core concept long established in game studies, the conception of the magic circle explains why cloud players and their attachment to the games are denied by many

other players: By watching others play in the game live streaming or videos, cloud players are still situated in the unordered ordinary non-play world as the spectators of others who actually enter the play world and make in-game actions. Unlike the streamer, the audience themselves are not indeed restricted by the in-game rules, avatars, tokens, challenges, and tasks that systematically differentiate the play world from the non-play world, so they thereby cannot have the real gameplay encounter in this sense. However, such formal interpretation neglects the complex mechanism that one connects with the play world which Huizinga (1955) amplified himself in Homo Ludens. He pointed out that the actualization of play, like many religious rituals, is a process of make-believe through representation stemming from one's experience of mental seizure. Play is a meaningful life and cultural function beyond simply biological stimuli or instrumental means, but possesses ends in itself. Clicking the mouse or tapping on the screen alone does not construct play. These ludic, meaning-making, and poetic functions are activated by players' shared imagination and consensus. When one chooses to watch a streamer play a game, she does not spend her time on watching a stranger doing nonsense clicks or taps, the very meaningful essence of her enjoyment lies in voluntarily acknowledging and mentally applying the game's settings, rules, and rituals along her course of thinking and feeling towards the unified game goal just as the streamer does.

The highly empathetic and synesthetic state of mind also exemplifies the continuous psychological state of experience that Mihaly Csikszentmihalyi (1997) called "flow" in his flow theory when one is going through intrinsic joy with full involvement in an activity since she approaches such a balance between her skills and the challenges that even the time passing-by won't be felt. When the audience are in the flow of their own intrigued by the streamer's play, they are in tune with the streamer's mood, mentality, and action as if they themselves are devising and using the game tokens to cope with the handicaps along the game course, bosses jumping from nowhere in games, having conversations with other players or non-player characters (NPCs). The audience walk through the game alongside the streamer and position themselves in the same place as the streamer. It is true that different individuals from the audience can develop varying levels of flow state, but their perceptions are all influenced by the game if not as much as the streamer's is. Sometimes, the mood swings in the flow state can be greater than those one has during one's own play because the condition of the public play on the live streaming stage is paid close attention together by all the audience of that live stream, whose winning or losing is amplified on a large scale.

2.2 Methodology

Existing literature on game live streaming has studied the three major stakeholders, the game live streamers, the game live streaming platform, and the users of game live streaming, mainly focusing on the motivations of game live streaming users

for watching, chatting, and gifting in the online channels (Sjöblom & Hamari, 2017; Wulf, Schneider, & Beckert, 2020; Lim, Choe, Zhang, & Noh, 2020; Xu & Ye, 2020; Li, Wang, & Liu, 2020; Li & Guo, 2021); the regulating mechanism of game live streaming platforms (Taylor, 2018); and the process of content production by game live streamers (Pellicone & Ahn, 2017; Li, Kou, Lee, & Kobsa, 2018). Yet it is still argued that even in the game live streaming that brings the audience in sync with the game content and pace as possible as the platform's streaming service and the Internet bandwidth allows, the audience can only witness what the streamer decides to unveil without making decisions to affect the game themselves. To further investigate the composite experience that cloud players have, an attitudes & behaviors online survey and interviews are conducted to help portray the Chinese cloud players' gameplay preferences, habits, and how they typically engage in game live streams.

The online survey of Chinese players' habits and preferences in gaming and watching game live streaming, was distributed in Chinese online game communities and on social media platforms between October 6th and 12th, 2022, and a total of 182 questionnaires were collected via a Chinese professional online survey platform (https://www.wjx.cn). Each survey respondent who submitted their questionnaire received a small amount of compensatory payment automatically given via the survey platform or could manually snatch the compensation via group chats' gift money allocation function. To reduce interference from respondents who provided inauthentic

information in the questionnaires only for survey compensation, the study considered 16 questionnaires from respondents that reported rarely playing any game in the past month as invalid. The 166 active game players in the final convenience sample covered 26 out of 31provinces/autonomous regions/province-level municipalities in China, including major metropolitan areas and highly populated provinces such as Jiangsu (23.49%), Guangdong (10.84%), Fujian (6.63%), and Beijing (6.02%), and consisted of 62.65% males and 37.35% females, most of whom aged between 19-29, slightly biased towards males and the younger generations compared to the demographic structure of the game population in China (199IT, 2019; Sina, 2021), but more consistent with that of the game live streaming audience (iResearch, 2021; TalkingData, 2022).

One-to-one interviews are conducted online and in-person with 5 participants (3 males and 2 females) after the online survey to further learn about those who both play games and watch game live streaming on a regular basis. The interviews are semi-structured with mostly open questions about typical scenarios for participants to engage in game live streaming and game preferences, as well as their feelings and interactions during their engagement, and the differences they feel between the former and gameplay by themselves. Each interview lasts from 1.5 to 2 hours during which on-site notes are collected and later organized for further analysis. In analyzing the survey and interview data, this paper introduces the concept of proxy play by leveraging theoretical frameworks of game taxonomy, agency theory, and frame analysis.

2.3 Descriptive Results

As can be seen from Table 1, a majority of the sample (N=166) had bachelor's degrees (61.45%) or above (26.51%), and overall had their monthly incomes above the average (CNBS, 2022), 28.31% of whom have their monthly incomes ranging from 5000-9999 RMB yuan (approximately USD 689.87 to USD 1379.61) and 22.29% of whom are of the high-income population (earning over 10,000 RMB yuan per month), in addition to a proportion of students (27.71%). Most of the participants (96.99%) played games over 1 time per week and among which more than half (53.01%) played games nearly every day in the past month. Most players (66.27%) spent over 1 hour on playing games per time and 28.31% of the participants' gaming time lasted from30 to 59 minutes each round, only 5.42% of the participants tended to play games in fragmented time. A majority of the participants identified themselves as amateur players (48.19%) who could play most games and rank in the middle or regular players (31.93%) who could not play too complex games. Most of the active players (66.87%) watched game live streaming over 1 time per week: 22.29% watched 1-2 times per week, 15.66% watched 3-4 times per week, and 28.92% watched nearly every day per week. Bilibili (61.48%), Huya TV (56.3%), and Douyu TV (42.96%) were the top three game live streaming platforms that participants went to. Douyin (28.15%) and Kuaishou (12.59%) as short video sharing platforms that lately expansively ventured into game live streaming were also increasing their market shares. Only few participants mentioned they would go to

oversea game live streaming platforms (Twitch and AfreecaTV). The rate of payment on games was overall higher than that on game live streaming. While 36.75% of the players had relatively low consumption (0-500 RMB yuan) on games, a majority of the players (46.98%) spent a medium amount of money (501-5000 RMB yuan) on game consumption over the past year. The annual game consumption by 16.27% of the participants even reached above 5000 RMB yuan per player. By contrast, among active players who had watched game live streaming in the past month (N=135), 26.51% didn't make any consumption ever for game live streaming, 48.41% had made small to medium amounts of consumption (under 1000 RMB yuan) so far, only 19.27% had spent 1000 RMB yuan or above on game live streaming in total.

Table 1: Game/game live streaming habits & demographics

		%
Frequency of playing games (including PC/console/mobile games) in the past month ***N=166**	Every two weeks	3.01
	1-2 times per week	22.29
	3-4 times per week	21.69
	5-7 times per week	53.01
Game minutes per time ***N=166**	Above 2h	34.94
	1-2h	31.33
	30-59 min	28.31
	Below 30 min	5.42
Game Competence Level ***N=166**	Professional (e.g., e-sports players and some game streamers)	0.60
	Expert（Ranking top on game charts）	15.66

	Amateur（can play most games and rank in the middle）	48.19
	Regular（cannot play too complex games)	31.93
	Novice（Only play simple games like chess and card, mini-program games)	3.61
Game Consumption (RMB Yuan) *N=166	>10000	9.64
	5001-10000	6.63
	1001-5000	28.31
	501-1000	18.67
	0-500	36.75
Frequency of watching game live streaming *N=166	5-7 times per week	48
	3-4 times per week	15.66
	1-2 times per week	37
	Every two weeks	6.63
	Every month	7.83
	None	18.67
Game Live Streaming Platform *N=135	Bilibili	61.48
	Huya TV	56.3
	Douyu TV	42.96
	Douyin	28.15
	Kuaishou	12.59
	YY	3.7
	Others	2.96
	NetEase CC	2.22
	Zhanqi	0.74
Game Live Streaming	>10000	5.42

Consumption (RMB Yuan)	5001-10000	4.22
***N=166**	1001-5000	6.02
	201-1000	11.45
	1-200	46
	None	26.51
Age	13-18	4.82
***N=166**	19-29	54.94
	30-38	37.23
	39-49	2.41
	≥50	0.60
Gender	Female	37.35
***N=166**	Male	62.65
Highest Education	Elementary School	1
***N=166**	Middle School	2.41
	High school	9.04
	Bachelor's Degree	61.45
	Master's degree	24.70
	PhD	3
Monthly Income on Average	≥40,000	1.20
(RMB Yuan)	20,001-39,999	4.82
***N=166**	10,000-20,000	16.27
	5000-9999	28.31
	2001-4999	11.45
	≤2000	28.31
	Student	27.71
	Non-student with no regular income	4.82

Total	100.0

Table 2 shows the research sample's preferences in game and game live streaming content as well as specific consumption items. Almost all of the players (95.78%) had paid for games. Hardware devices that improve game experience and original game content including paid game titles, battle passes, and DLCs are the top items that participants are willing to consume. A considerable proportion of participants would also pay for in-game add-ons including but not limited to costumes, accessories, membership, gift packs, characters, and weapons. The preferred game genres played by the participants indicated consistent results with relevant market research (Think with Google & Niko Partners, 2020; Rakuten Insight, 2022): Battle Arena games like MOBA and Asymmetric Competition (57.23%) as well as Action & Shooting (42.77%) games such as first/third-person shooting and fighting games were the leading game genres. Casual (34.34%) and RPG (32.53%) games remained popular among Chinese players. Other themed games like Survival & Sandbox games (22.89%), SLG (19.28%), and Simulation games (18.07%) also had a considerable number of loyal players.

As for the popular streamed game genres, though most of the game live streaming audience watched more than one type of game, industry reports (Niko Partners, 2020; ZOL, 2022) and my monitoring of ranking charts from the major game live streaming platforms also indicate that Action & Shooting, RPG, and Survival games are still the perennial favorite games among the audience while interactive mystery-

solving, social deduction, and platform games usually with exotic or subcultural themes such as horror, wild west, and cyberpunk attracted more audience's interest in game live streaming. In terms of the streaming forms, over half of the game live streaming audience preferred watching amateur streamers' casual matching games. Streamers' teaming up (41.48%) and official live streaming of game competitions/awards/and conferences (35.56%) are respectively the second and third popular streaming types. Regarding the participants' typical activities during the game live streaming, game content and techniques are among the top priorities of most audiences. While 34.07% of the participants claimed that they would not do too many interactions, but just watch the streaming, interactions with streamers and other audiences, such as game discussion/polling (26.67%), non-game-related chatting (19.26%), co-play (18.52%), and sending virtual gifts (14.07%) had become vital activities for the audience to engage in the game live streaming. It is noted that 24.44% of the game live streaming audience claimed that they would do other stuff at the same time. The audience also valued the vibes of streaming channels a lot, even more than streaming quality like streaming graphics and sounds. Disputes among the audience, pressure on gifting, or the audience's interference in streamers' gaming are the three major dealbreakers in game live streaming.

Table 2: Preferences & attitudes of games and game live streaming

***Examples in parentheses**	**%**

Game Genres *N=166	Battle Arena (MOBA/Asymmetric Competition)	57.23
	Action & Shooting (Fighting/FPS/TPS/Slash)	42.77
	Casual (Tile-Matching/Chess/Mini-Program)	34.34
	RPG (MMORPG/Adventure RPG/Action RPG/Strategy RPG)	32.53
	Survival & Sandbox (Battle Royale/Escaping)	22.89
	SLG (RTS/TBS/Tower Defense/Military/4X)	19.28
	Simulation (Life/Building/Farming/Hobby/Job/Space/Flight/Dating)	18.07
	Mystery & Puzzle (Novel/Detective)	13.86
	Sports & Racing	12.65
	Music & Rhythm	12.65
	Card & Board (Party-Based/Tabletop)	11.45
	Platform	9.04
Game Consumption Items *N=166	Hardware (PCs/Console/Controller/Headset/Keyboard/Mouse/E-Sport chair)	45.78
	Official Game Titles (Pay-to-Play Games)	44.58
	Battle Pass/Game Bundles/DLCs	40.96
	Costumes & Accessories	32.53
	Weekly/Monthly Membership & Gift Packs	30.12
	Characters/Weapons/other Leveling-Up Items	29.52
	Box Opening/Card Drawing	25.9
	Gifting & Socialization	21.08
	Game Derivatives/Merchandise	16.27
	Coaching & Playmates	11.45
	None	4.22
Game Live Streaming Type *N=135	Amateur Streamers' Solo/Random Matching Games	56.3
	Streamers Teaming Up	41.48
	Official Live Streaming of Game Competitions/Awards/Conferences	35.56
	Streamers and Audience teaming up/friendly matches	28.89
	Streamers' Trying New Game Demos/Beta Versions	26.67
	Professional E-Sport Players' training	26.67
	Game Launching/Game Developers' sharing	18.52
	Others	5.19
What to do during game live	Focusing on the game content	54.81
	Learning gaming techniques	44.44
	Not Much Interaction (Just Watching)	34.07

streaming *N=135	Participating in game-related discussion/polling (Game analysis/result prediction, etc.)	26.67
	Doing other activities at the same time (E.g., opening other webpages/apps while playing the streaming in the background play or a video pop-out)	24.44
	Proposing/discussing non-game-related topics	19.26
	Paying attention to streamers' personal updates	18.52
	Co-playing games with streamers/other audiences through sending danmuku/voting	18.52
	Gifting/supporting streamers (Sending virtual gifts/donating Money, etc.)	14.07
	Others	0
Upsets during game live streaming *N=135	Disputes among the audience (trolling/provocative speech/spamming)	63.7
	Pressure on monetization (Over or undue inducements by streamers for gifting or money)	51.85
	Audience's interference in streamers' gaming (Purposeful matching/screen peeping)	44.44
	Low-quality graphics/sounds	42.96
	Lack of or low-quality interactions between live streamers and the audience	34.07
	Poor Game Performance of live-streamers or other players (Poor skills/attitudes)	20.74
	Streamers' low morality or controversial values/speech/deeds	19.26
	Others	2.22
	Total	100

2.4 Cross Analysis

By directly asking respondents in the final part of the survey if they had been a "Cloud Player" who experienced a game primarily through indirect means such as live streaming and videos at some point, we would like to learn about the make-up of cloud players and whether they have any different attributes from ordinary players, such as the game competence, preferences, and consumption. It turned out that 65.66% of the

active players chose “Yes,” which means a majority of the sampled active players identified themselves as a cloud player at least once of a particular game during a period. Among those identified as cloud players, 97.25% of the participants claimed that the live streamed games they watched were mainly those they had played or ended up playing themselves while only 2.75% claimed that they mainly watched games that they never played. This indicates that the status of being a cloud player is not static and an individual can be both a player and a cloud player of a game.

Pearson’s Chi-Square Test was used to explore if there were differences in variables between cloud players and non-cloud players. The results showed no statistically significant difference in demographics between cloud players and non-cloud players. Whether participants' being cloud players or not was independent of the person’s age, gender, education, and income. There was also no significant difference in identification of a cloud player between the time-filler-type players who tended to play quick games or once in a while and devoted players whose gaming time was longer with higher gaming frequencies, or players of different levels (game competencies). No significant difference was found between cloud players’ and non-cloud players’ game consumption amounts. Cloud players don’t play or spend less than non-cloud players. As to game-relevant purchasing preferences, only game derivatives/merchandise among all the paid game items were purchased more by cloud players than non-cloud players ($\chi 2 = 4.575$, $p < 0.05$), to some extent indicating cloud players’ probable propensity to

view games more as an everyday, empathetic enthusiasm than a discrete, virtual, and instrumental recreation. Regarding self-played game genres, cloud players showed more preference for Music & Rhythm games than non-cloud players did ($\chi2 = 4.239$, $p < 0.05$).

Cloud players and non-cloud players displayed statistically significant differences in game live streaming consumption habits and preferences. Cloud players spent more time ($\chi2 = 9.228$, $p < 0.05$) and money ($\chi2 = 14.011$, $p < 0.05$) on game live streaming than non-cloud players. Cloud players chose Bilibili more than non-cloud players as one of their go-to game live streaming platforms ($\chi2 = 4.857$, $p < 0.05$) while non-cloud players chose Huya TV more than could players ($\chi2 = 8.236$, $p < 0.01$), which makes sense due to the different orientations of the two. Bilibili is based on the AGC community but more like a pan-entertainment platform while Huya TV is initially known for being a social hub for only gamers despite the two's latest efforts in expanding their businesses. While similar in other preferred game live streaming types, non-cloud players would watch professional e-sport players' training more than could players did ($\chi2 = 4.366$, $p < 0.05$). As to what typically to do during game live streaming, cloud players paid more attention to streamers' personal updates and would have conversations with streamers about it more than non-cloud players did ($\chi2 = 6.587$, $p < 0.01$). It was also more common for cloud players to do other activities at the same time, for example, to open another webpage while playing the game live streaming in the background play or a video pop-out, than non-cloud players ($\chi2 = 5.157$, $p < 0.05$). It is

also noted that though disputes among the audience, such as trolling, provocative speech, and spamming, were the most disliked phenomenon during game live streaming by all the players, be it cloud player or non-cloud player, 75.68% of the cloud players compared to 53.85% of the non-cloud players chose "Disputes among the audience" as one of the upsetting things during game streaming ($\chi 2 = 4.366$, $p < 0.05$).

Cloud players and non-cloud players also showed differences in terms of their emphases on different game experience facets. The survey question on game experience facets are synthesized consulting Richard Bartle's four typical dimensions players sought at games and the corresponding player typology (1996), Roger Caillois's game taxonomy (2006) that developed a continuum between paidia (free and anarchic play) and ludus (purposeful and regulated efforts) with four quadrants - competition, chance, simulation, and vertigo, and Nick Yee's Gamer Motivation Model (2015) that profiles players' clustered motivations and their relationships. The average ranking score of each facet in the ranking question is calculated based on the ranking orders of the particular option by all respondents, reflecting the overall importance of the specific game experience facet to the respondents. A higher score indicates a higher composite ranking, namely, greater importance among all the facets. The calculation formula is as follows: Average ranking score = (Σ Frequency x Weight) / Number of Respondents. The weighting is determined by the ranking position of a facet. For example, if there are 3 options for ranking, the one in the first position will have a weight of 3, the second will

have a weight of 2, and the third will have a weight of 1. Table 3 listed different composite scores that cloud and non-cloud player groups gave to different game experience facets which are colored in different shades to represent their relative importance (Orange-Yellow-Green-Blue demonstrate the most to the least important facets). It is shown that both cloud and non-cloud players prioritized sensual enjoyment (like audio-visual effects, game control, and feedback) as well as immersive simulation as their main interests, while cloud players attached more importance to competition & achievement, tactics & strategic thinking at games, as well as game collection & assets than non-cloud players. Non-cloud players on the other hand valued narration & storyline alongside skill building & self-challenge more than cloud players did.

Table 3: Average ranking scores of game experience facets for different players

Game Experience Facet	Cloud Player	Non-Cloud Player
Sensual Enjoyment	7.84	7.04
Simulation & Immersion	7.44	7.54
Competition & Achievement	7.2	6.89
Cooperation & Socialization	6.76	6.64
Virtual World Exploration & Interaction	6.64	6.96

Tactics & Strategic Thinking	6.44	6.31
Narration & Storyline	6.42	7.45
Crafting & Creativity (DIY)	6.27	6.43
Collection & Assets	6.16	5.67
Skill Building & Self-Challenge	5.87	6.15
Adrenaline & Excitement from Uncertainty & Fortune)	5.6	5.31
Mystery Solving & Detection	5.35	5.55

Our analysis above manifested some relevance and irrelevance between the cloud player identity and demographic, behavioral, and attitudinal variables of players. By and large, cloud players are an important part of the vast Chinese game players; cloud players and non-cloud players have a considerable overlap between each other in terms of game habits, consumption, and preferences; cloud players overall have more engagement in game live streaming than non-cloud players in terms of time, consumption, and features. The findings yield some interesting portraits of cloud players as a group as well as further questions on the potential mechanism behind the motivations and actions of the unexpectedly diverse cloud player community that is composed of neither the backseat viewer nor solely the assumed casual player. To

facilitate our understanding on cloud players and how they enjoy and experience games through game live streaming, following-up in-depth interviews were conducted with five distinctive participants who all claimed to be cloud players but have very different gaming preferences and live streaming engagement habits. The following section dives into cloud players' daily game-live-streaming engagement scenarios in detail to investigate in what cases they choose to experience the games through live streaming, how they feel along the way, and what they gain. In our examination of the survey and interview data utilizing the established frameworks from the agency theory and frame analysis, a new pattern of experiencing games is discovered and introduced.

3. How Cloud Players Play

3.1 Levels of Game Agency

Back to our previous question in Section 2 that cloud players who choose to "play" games through live streaming have limited or trivial influence over their game experience, it is recognized that the core of playing games lies in a player's sense of control over in-game characters and events. Game is known as a form of art where participants make decisions to manage resources through game avatars and tokens in the pursuit of set goals (Costikyan, 2006). The functionalities and features unique to games, as a fantasy of relatively simplified and uniform values compared to the secular world full of uncertainties and misfortunes, afford players with the abilities entitled by their avatars in games that are designed to align players' actions with their goals. The fit between desires and capabilities combined with the ownership of actions and consequences in games demonstrated a gamer's agency, which is what the traditional players and streamers have while playing games themselves and also the level of agency most familiar to the general public. However, this paper argues that in game live streaming, while streamers control the play through in-game avatars, the audience are not just spectating or speculating about the game progress alone, instead they tend to actively utilize the affordances by platform outside games - usually real-time chatting, super notes (paid comments), and voting through their social avatars - to let the

streamer become their ideal avatar at games. The interviewees described how they felt about streamers' play as follows:

I initially watched Koudai, a game live streamer famous for playing Kings of Honor on Huya TV, to learn game techniques because he could perform skillful maneuvers that I was unable to make. Watching him play the game, we (the audience) feel as if we were playing ourselves. I feel happy and excited when our side manages to beat the opponents and nervous when we make mistakes. As time goes by, I gradually grasp the strategies and would give my suggestions from time to time through danmuku along with other audiences. (Interviewee 1)

I like subscribing to game live streaming channels mainly because the streamers play much better than me. Sometimes when the streamer is not being himself, we (the audience) and even he himself will make fun of him, just kind jokes, hoping he could get together soon. But if the streamer continues to be really off or absent-minded for hours or days, I will just turn to other streamers for better performance. I certainly do not want bad game experience continuously in live streaming channels, otherwise I would play the game myself. (Interviewee 2)

Basically all the streamers I follow, except those professional players during their training, would take the audience suggestions or requests during the games. For example, they would select which game to play in this time slot based on the real-time chat messages. They would directly ask us for some information that they missed or

advice on the particular game session, which happens a lot. Especially when the streamers are playing games that involve a lot of decision making to advance the stories, like mystery solving and interactive novels, they not only would keep an eye on our opinions through danmuku, but also would let us vote on their following actions. (Interviewee 5)

The participants' illustrations give us clues to how cloud players seek their presence and sense of control, or rather, agency indirectly at a game through live streaming. In addition to understanding and appreciating the play world via getting through game rituals, accepting, and applying, though mentally, game rules, cloud players attempt to reach their game goals and acquire their agency by selecting and submerging themselves in the avatar of a game streamer who directly control the in-game avatar and synchronously sharing his/her experience with all the live streaming participants to influence the collective game experience. The streamer is an embodiment or incarnation of the game live streaming audience's, or more exactly participants', ideas and actions. The participants are supporters, co-players, and supervisors of the streamer across distances. Carruthers and Smith (1996) had long studied the cognitive capacity of individuals to assign mental states to oneself and others and feel what others feel. Nevertheless, such indirect agency is inevitably restricted by the streamer and audience's interactions. Different participants may have different opinions. It is difficult for the streamer to pay attention to everyone's comments and distinguish relevant

feedback from spamming and emoji cascades unless one is willing to pay for super comments of different prices that will be highlighted and hanging up above the chatting window for a period of time. Most importantly, unlike one that could have full control over his/her avatar in games, the streamers are not puppets of the audience, but instead have their own judges and moves to make. This all could abate cloud players' sense of agency, yet magically strikes a subtle balance between obtaining the agency and not shouldering too much responsibility. When asked why they choose to engage in game live streaming, instead of playing the game by themselves, all of the five interviewees, regardless of their game competence or habits, explained that it is a more efficient and pleasant way for them to experience games.

I feel I have greater autonomy when I "play" through game live streaming than play games myself. I could get a picture of what a game that I never played before is really like through streamers' game live streaming and then decide if I want to spend my time and efforts playing the game. Whether it is a new game or the game I am familiar with, I could selectively focus on game sessions I am interested in and call an end to the game experience when I lose interest or have to go. (Interviewee 5)

When I did not play a game before or I am still not very familiar with some of the game sessions or mechanics, I prefer to let the streamer walk me through first or lead me to go through the game content. I can also discuss what to do with other audiences. I am still in the gaming state, but I am much less pressured to make all the decisions by

myself so that I could think more calmly and better appreciate the game's graphics, music, and storyline instead of worrying about if I will die the next second wholeheartedly. (Interviewee 4)

I see game live streaming as an alternative way to have fun and relax compared to playing games myself which often brings a lot of emotional ups and downs. When I experience games through live streaming, I feel like I were playing but with less stress and nerves. Of course I still feel angry, for example, when the teammates perform poorly, but these tensions are released sooner and easier compared to when I play games myself. We the audience and the streamer will banter with each other, analyze the cause of our mistakes, and draw lessons from setbacks together. The positive and confident attitudes of the streamer impact our moods. We kind of like encourage each other during the play, and rarely have extreme anger or other negative emotions. (Interviewee 3)

Seering et al. (2017) in their study on audience participation games classified the level of control over game mechanics as the individually-focused agency and the level of engagement with other members as the socially-focused agency. They defined one's ability to take in-game actions and affect the game's outcome as the major metric for individual agency, and social agency to be the one that builds on social connections between audience members and performers. Elucidate that the former - manipulating gameplay - is core in traditional gameplay, they amplified the latter metaphorically

based on Tanenbaum's (2009) and Trimbur's (2000) work on agency: Just as in literature and theater where audiences watch, monitor, and question the fictional reality created and performed by authors and actors through communication, the observing and interpreting of game audience participants who often impact the game as a member of a crowd can be understood as actions through their interconnections with streamers and other audience. They emphasized both individual and social agencies as meaningful metrics for game interpretation and experience and suggested that audience participants' commitment to meaning-making, choice-making, and social network in the improvisational, para-social, and co-op game live streaming is as vital as the direct and personal action-taking by the individual agency. Their classification suggested that agency in games is not only about the relationship between the sole player and the game medium, but also in players' idea exchange, community bonds, and co-written narratives that construct the mediated co-play space, which was also substantiated in our interviews with the cloud players.

One reason I like engaging in the game live streaming is for companionship. After I kept following the streamer for a while, I began to be attracted by his personality and humor besides just his gaming skills. My continuous interest in game live streaming is not only about games, but also due to the way the streamer presents and narrates the game with us. Once we get into a fun or an impressive game scene, we put on shows

with the streamer by starting kind jokes, using argots, and memes. These fun moments are a vital part of our play. (Interviewee 3)

One's comment if not always, at least most of the time, gets replies here (during the game live streaming). It feels great that my feelings and opinions about the ongoing game content get echoes and other immediate feedback either from the streamer or other audiences, and sometimes even start a heated conversation in the chat box. I have dual enjoyment of playing and reflecting on the game with others. This is difficult to achieve by playing myself, you know, to find someone like-minded to play and chat with whenever I want to play a game. Also, communicating with netizens is less stressful than with real-life acquaintances in that I would worry less about the impact of divergences. This motivated me to pay (gift the streamer) to attain the streamer's fan badge[10], becoming a formal member of the community. (Interviewee 1)

I consciously pick up channels with good vibes to subscribe because I love to chat and bond with other audiences. To uphold the fine order of the streaming channel, I tend to spend a lot on gifting the streamers I favored, which enables me to become one of a channel's administrators who can block unfriendly comments and spams. It is fairly common for the coterie of loyal audience of the streamer to greet and chat with each other in the channel. We also have our own group chats with and without the streamer

[10] A type of identity emblem of a streamer that ranks the audience by points gained from gifting the streamer and spending time in the channel, could help clarify social roles and encourage interaction. The loyal and active audience participants designated by the streamer as the channel's administrator also have glaring tags beside their names. These unique and temporary community roles help audience participants gain senses of social agency and belonging.

we follow outside the streaming platform where we discuss everything from games to our personal life. The streamers will first notify us about their streaming updates and ask about our interests when it comes to streamer-audience matches and offline events like meet-and-greet and birthday parties. I gained many playmates across the country from participating in game live streaming. (Interviewee 2)

In addition to watching e-sport players' daily training, I keep track of their personal updates during the live streaming and on other social media. I witness their progress and setbacks and they are like old friends of mine. Taking one game that I myself rarely play any more for example, I still pay attention to the game's seasonal matches and continue following the game's news because the gamers I know are still playing it. During their game live streaming, my focuses keep changing from savoring the game itself, concentrating on their moves, to cheering for them in the chat box (Interviewee 5).

None of the interviewees restricted their play experience to only the game content or sought a single level of agency. The audience participation that expressively and dramatically co-creates the game experience and narration with the streamer, the bonds and co-play between streamers and the audience imply that different levels of agency are often entangled and could impact each other. Their play purposes change with the specific game content, streamers, and scenarios as well as the progress of the game, the live conversation, and the interaction mechanism. Therefore, rather than

attribute the levels of agency to different types of players, for instance, trolls and power-seekers desire individual agency, collaborators and helpers seek social agency (Seering et al., 2017), this paper insists that, in accessing the play world, picking up avatars, processing game content, making game input, cooperating or vying for game goals, impacting the game course, connecting with other participants, or even backseat viewing, the massive, protean engagement of the audience participants of game live streaming demonstrate a mix of as well as a continuum between levels of agency. The cognitive and affective process of "proxy play" by cloud players encompasses their agency fluidity in multi-identity switching by taking on temporary ends and submerging oneself in temporary and alternate agencies to shift towards and away from various playing purposes incorporating striving, flow state, aspiration, speculation, entertainment, socialization, aesthetics, inspiration, ambiance, etc.

3.2 Proxy Play: Framing in and out

Playing games itself can be a motivational inversion of ordinary practical life that sets oneself a game purpose in pursuit of the process, enabled by us humans as rational agents who have the capacity for agential fluidity (Nguyen, 2020). The games, admittedly, are artifactual vessels with which players can communicate modes of agency; the live streaming platforms with all the PUGC and affordances, they gather are trans-regional stages on which the performers and audience participants connect and interact; yet how cloud players initiate proxy play, namely how they empathize with

avatars through avatars, how they manage to shift from one agency to another, how they shuttle back and forth in the play and social space, to construct and extend their play experience essentially lies in how they fathom the play world and non-play world, which we briefly touched upon in Section 2.1 addressing the concept of the magic circle. It's not only that the streamer as the streaming content producer and the live streaming platform as the interactive arena provider that are sandwiched between the game itself and the audience participators. The audience participators engaging in the game live streaming are also sandwiched between the (non-)play world, the streamers' and their own mentality, and the socialization chamber. This paper finds Goffman's framing theory (1974) a seminal counterpart to the concept of the magic circle and a constructive analytical framework to systematically interpret and formalize the sociocultural pattern of proxy play by cloud players.

In the initial definition of the magic circle given by Salen and Zimmerman, a vital concept was referred to, that is, frame. Acknowledging the concept from an essay Unwritten Rules written by Stephen Sniderman (1999) which describes the frame in the context of gaming as circumstances surrounding play that determines the proceeding of a game, Salen and Zimmerman see it synonymous with boundary and use them interchangeably. They thus call the boundary or frame as the magic circle. Frame, in the conceptualization, is the marker of game space as well as a safety net and signal that stipulates and assures the play, a failure of retaining which will bring a disillusion that

ceases the play. The magic circle frames a distinct space of meaning that is separate from, but still references, the real world (Salen & Zimmerman, 2003, p. 116).

Gregory Bateson (1955) introduces the concept of psychological frames as the mental representation delimiting what are meaningful actions, namely the metacommunication, in his essay discussing playful human interactions. As to the concept's development and application in Sociology or the broader social science, it is mainly attributed to the work of Erving Goffman. Goffman (1961) notes that games are unique world-building activities which "place a frame around a spate of immediate events, determining the type of sense that will be accorded everything within the frame" (p. 20). Frames are thus socially constructed and shared, providing meaning in a focused gathering - what Goffman calls an encounter (1961) – embedded in the larger social structure, such as a party, sports, and gameplay. Different from Salen and Zimmerman's assumption of the lastingly enchanting the magic circle, Goffman believes that in activity-centered gatherings like this, participants can quit the gathering and thus terminate the encounter as likely as they join the situated activity system. An encounter is neither a duplicate of the ordinary world nor a microcosm in its own right. In the game context, meaning is made through a set of transformation rules, rather than game rules given by designers, that defines for the participants which particular aspects and attributes of the wider world are to be incorporated, represented, or modified within the play world. For Goffman, rules of irrelevance and relevance take effect at the same time.

For instance, players tend to forswear material interests like the value of the game equipment or offline identities and relationships when playing games. Yet external elements like social stratification and financial status may also intrude into games and impact players' performance, or even smash the play. Goffman introduces the permeable boundary between the game and the wider world as an "interaction membrane" (p. 65). So does a game generates a plane of being and an engine of meaning for events, interactions, and identities to emerge and be understood that otherwise would not be formed or perceived in this way. So is a game distinguished from and connected to the ordinary life.

Later in his seminal book Frame Analysis: An Essay on the Organization of Experience, Goffman (1974) further developed the theory on encounters by crystallizing the social organization of people's experience through the concepts of framing and keying. According to Goffman, people in the everyday life are often expected and prompted to enact different behaviors and identities in different situations. Frames represent the series of situational definitions and principles of activities with regard to various types of social situations composed of shared understandings, norms, events, and commitments. Based on their knowledge of these common repertoires, individuals manage to quickly read other people's actions, meaningfully structure and appositely handle the situations. Since the process of framing is often taken for granted in daily meaning rendering and decision making, Goffman deconstructs the implicit schemata of

interpretation with different frameworks. On one hand, there are natural frameworks identifying purely physical occurrences without the interference of willful agencies or oriented guidance, such as axioms in physics and biological science. Social frameworks, on the other hand, “provide background understanding” for events that incorporate the intention, purpose, and controlling effort of human beings (p. 22). Goffman defines the basis for human interpretation of events as primary frameworks. Primary frameworks, in neatly articulated forms including entities, postulates, and rules or more discursive forms, allow users to “locate, perceive, identify, and label” concrete occurrences defined in their own constructs. When people "frame in" or "frame out" particular issues, transpositions take place. Goffman captures systematic alterations in meaning perceptions where “the set of conventions by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else” (p. 43-44). He then uses a musical analogy keying to term such process of transcription. In particular, when a performer puts off or fails to take on an expected role or character and results in a frame break, Goffman calls this operation of rules of relevance as downkeying. Upkeying happens when the performer shifts to a greater distance from the primary framework in literal reality, which can be understood as an application of rules of irrelevance. A keyed activity, for example modulated as an irony, rehearsals, simulations, play, pretending, practicing, etc. can be further transformed by rekeying.

Goffman also notes that other deviations like fabrication can occur when an individual or a group intends to induce others to have a false belief about what is going on. Through keying, rekeying, and fabrication, additional layers of meanings are added to the primary frame. An activity thereby obtains multiple laminations. That is why different individuals and groups can form various frames and frames themselves also change through time. How an individual or a group experience and respond to an event in a given situation depends on how one/they frame(s) it in the first place and unpack(s) the framing process which one/they earlier agree on or deceive each other about.

Goffman notes that gaming is socio-culturally organized in terms of norms, rules, and props to generate participants' engrossment and awe in an activity. Gary Alan Fine (1983) further adopts and specifies Goffman's frame analysis in the context of RPGs in his book Shared Fantasy: Role Playing Games as Social Worlds. He sees fantasy gaming as encounters organized into three distinct frameworks, namely the real world where participants with their original social identities and relationships mobilize commonsense knowledge, the world of game rules where participants act as players in light of the game structure and conventions, and the fantasy world as a hypothetical primary framework itself where participants enact characters inside the fictional narratives. Players may discuss entirely game-external matters in the primary framework, talk about game issues with game terminology in the secondary framework, and get into characters within the fantasy setting and avatars of a game in the tertiary framework. In

each frame, individuals enact different role-identities as they define reality in terms of the relevant occasion.

Moreover, Fine conceptualizes players' activities as movements between frames, pursuing Goffman's notion of keying which may completely alter a primary frame. That means a player upkeying from daily life to the play world is actually moving to a frame within the enveloping primary frame of the vast reality and might quickly move back (downkey) to the primary frame for in gaming frames are more likely to be rapidly keyed than mandatory frames in the physical world. To make sense of the gaming situations, players move between these operative frames swiftly, intuitively, easily, and frequently. Such frame-distinguishing metacommunication and frame shifts are explicit in implicit patterns of speech, gestures, and rituals. As Goffman (1974) puts it:

Cues will be available for establishing when the transformation is to begin and when it is to end, namely, brackets in time, within which and to which the transformation is to be restricted. Similarly, spatial brackets will commonly indicate everywhere within which and nowhere outside of which the keying applies on that occasion. (p. 45)

Players often use brackets to signal the ongoing frame status or to indicate a switch of the frame in response to specific cues, be it the dedicated words like "cut," maps in tabletop role-playing games (TRPG), or the layout, costumes, and props in live-action role-playing games. In this case, players negotiate a reality that is constantly in tension and dynamics. That is why Pargman and Jakobsson (2008) state that "there is nothing

magic about switching between these roles. It is something we do all the time and can be done literally at the blink of an eye" (p. 238). Along similar lines, they concur with Goffman in the ordinary life frame as the baseline for all activities and people establish, enter, and maintain sub-frames that redefine the situation at hand. In all of these roles, one tries to manage their impression to fulfill the expectations of their audience as best as they can. While Salen and Zimmermann similarly attempt to locate games as activities that take place within "frames," they in practice treat frames as literal rules of the game code. Rules of games in Goffman's analysis, on the contrary, are not like the rules of a bureaucracy, which are intended to reduce unpredictability across cases, but are socio-technical contrivances and calibrations generating contingencies. The inveterate unpredictability of everyday experience and the mix of predictable and unpredictable outcomes in games are thus bridged (Malaby, 2007). The key distinction between the two theories is not the demarcation between the real world and the play world, but more of the degree of agency attributed to players. Games are indeed an aggregate frame complex where subjects engage in the realm with their autonomous adoption, frequent entry and exit, willful zooming in and out, to discern, interpret, practice, and get the meaning out of games themselves. One can be absorbed in the sheer game flow created, stand in the streamer's shoes, deliberate with the audience co-players, or shifting, consciously or not, their status from one to another. The perspectives that the frame analysis introduces well manifest that proxy play is not a wholly novel

activity that emerges from a disparate non-player group, but an emblematic play mechanism that naturally grown by the Chinese player community in dealing with the increasingly diffusive act of play as well as their composite and flexible mediated self-representation and identification through the capricious human-computer interactions.

4. Conclusion

Different from other media art forms such as films, musicals, and painting, gaming is invented to not only to be active, but also interactive while traditionally spectatorship tends to be considered as the opposite - one being occupied by the influx of scenes, audio, performance entangled with dramatic emotions and messages with a rather passive reception of the exhibited gist and aesthetics. Even the audience attempt to make active judgments along the way, the channel of interaction is restricted and far from simultaneous in the past. However, the emergence of the group of Cloud Players who engage in play, often in gangs, by picking on their shared guiding avatars and co-players to exert influences not only over the game orientation and progress, but also the game vibe and experience for all gathering in the live streaming rooms, challenges the traditional definition of gameplay. The title Cloud Player has been widely used by gamers to police the boundaries between the core gaming group and "outsiders," and often to stigmatize others in game reviews. The increasing openness as well as exclusiveness, sometimes xenophobia, of the gaming community are entangled with the digital intimacy and filtered sociality sheltered by the game space and (a)synchronous communication channels. The emergence of game live streaming on one hand acts as an ongoing democratization of gaming by decentralizing the once exclusive privileges of the niche group to the broader public, and on the other hand breeds its internal hierarchy of the content producers and consumers. The evolution in game manners from

solo play to connected and proxy play is accompanied by changes in how people interpret and enjoy play, which contributes to the consumption assemblage of "media via media" and complex relationships between audience participants, streamers, live streaming platforms, and game developers.

This research is a preliminary attempt to explore the identification and population of the so-called Cloud Players in China as well as their game experience manners. The survey figures might not be absolutely accurate though the questions had been phrased as non-discriminatory as possible, yet the findings yielded from the research proved against the conventional perception that cloud players are supposed to be a shameful and silenced marginal group. Cloud player is not some static or rigid identification that goes with someone for life either. Instead, cloud players are indicated to be an endogenic, fluid, and composite identification with the ought-to-be diversified and dynamic player community. Players should have the capacity to actively choose their own ways to experience games variously for various reasons at different stages. Cloud player is probably just one of the modern players' personas that favors consummate game performance with less treadmill but more emancipation, and is more accustomed to enjoying play as a participatory, collective, and improvisational carnival. The way that proxy play takes effect is not merely in cutting through the "magic circle," but constructing the multilayer frames that players find naturally, smoothly, and easily to satisfy their multiple game experience goals from social and personal integration,

cognitive and affective, to tension release, etc. (Li, Wang, & Liu, 2020). As Gee (2014) pointed out in his work discussing a unified theory of conversational communication that covers verbal conversations, conversations with the world, and with game worlds, games can be understood as a novel turn-taking form of conversation, like other conversations with the real world, where players take on probe-response-reflect-act again cycle to indirectly align with the game world and look for ways to accomplish goals through the virtual or tangible, minimal or multiplex avatars as bodies, roles, and toolkits. Playing characters in games, corresponding with adored gameplay delegates, connecting with other virtually present players, and acting out different roles in the daily life are all within the realm of obtaining different modes of agency by taking on various avatars. Gamers read game worlds, just like they read the real world, in terms of how the images and possible actions in the game world can be used to solve problems and make game-relative interpretations of visual elements not only based on the game mechanics and affordances composed of syntax, semantics, packaging, flow, style, and situated meanings, but also according to their social and cultural discernment that constantly impacts the context of play.

Proxy play does not necessarily designate gaming through live streaming only, but more is a mediated game manner packed with interactive possibilities that goes beyond one's corporeal presence as well as an unbounded play experience driven by us humans' daily meaning-making and identity-shifting mentalities that could shelter

manifold levels of agency and motivations. Game live streaming is not a contemporary utopia for Chinese gamers either, it is a product of negotiation between the state's curtailment of games' publication numbers (ISBN) and live streaming policies, game developers' and operators' authorization of copyrights and marketing strategies, platforms' regulation and commercialization of live streams, MCNs' and streamers' intermediary labor, and gamers' changing play motivations. With the continuing development and popularization of cloud technologies and high-speed networks such as 5G and fiber optics to homes, it is noted that the ambitions of the game and streaming industry are no longer limited to designing a detached magic circle dwelling episodically by separate clients' devices. The introduction of community games and audience participation extensions to live streaming platforms, though still with slight latency, enables the audience not only to vote, gift, and send command messages to influence the in-game tokens and conditions (Seering et al., 2017; TSUKAIME, 2022; Players' Guidebook, 2022), but also get themselves incarnated in different game avatars that appear in the streamed game to co-play with each other (GameTHK, 2022). The study of AR and VR games' control alternatives to hand gestures like head motions, lip movement, eye-tracking, and face-tracking (Brucculeri, 2021) may also inspire the normally text-based game live streaming to sufficiently accommodate complex instructions or plan courses of action from the participants. Moreover, prominent game developers (e.g., Ubisoft, Electronic Arts, Sony PlayStation, Tencent, and NetEase), tech

tycoons (e.g., Microsoft, Google, Amazon, and Alibaba), even some streaming platforms (e.g., Netflix) and mobile communication operators (e.g., Verizon and China Mobile) have been striving to expand players' gaming media and scenarios (Hadar, 2021; TMTPOST, 2022): Cloud gaming, also known as gaming on demand, enables the thin clients with relatively low graphics processing and data computing capabilities to run high-quality games, in which games are not downloaded on players' game terminals, but stored on the cloud server that renders the game scenes into video and audio streams and transmits them to players' terminal devices through the network. Players can use any game terminal, from laptops, smart phones, tablets, to televisions, as the streaming media and sender of input commands to the cloud server. Though currently faced with contention over the suitable business model in different game markets[1], and challenges such as fluctuations of graphic quality and FPS drops caused by server distance, coverage, network transmission protocol, bandwidth, and codec technologies, cloud gaming promises a vision that players' game experience could shed restrictions from client devices or operation systems and still be guaranteed and even augmented like never before; that games with cutting-edge interaction affordances, ultimate resolutions, delicate dynamic effects, visual details, and astounding sound effects like Hollywood blockbusters that cannot be run on common consumer equipment can be

[1] Main revenue models for games include subscription, B2P (Buy-to-Play), P2P (Pay-to-Play), F2P (Free-to-Play) & Item Mall. While Chinese domestic gamers have been used to the F2P model, namely free downloads with internal purchases, a majority of oversea gamers are more used to B2P.

developed and accessed by more players over the cloud. The Chinese game community who had embarked on trying novel and mixed gaming manners have the potentials to embrace the increasingly open and connected play. This study attempts to investigate Chinese gamers' shifting game experience from perspectives of state policies, the techno-economic environment, and the target group's participatory mechanism. The profile of Chinese cloud players endeavors to destigmatize the gaming population that choose to experience games in multiple ways and unveil a nonorthodox play manner of the gamer community, meanwhile supporting more cross-cultural studies on mediated and interactive recreations. The study has its limitations by reaching a relatively small sample of the Chinese gaming population and only addressing the game experience of Chinese cloud players through game live streaming. Future research on game live streaming may continue to examine more audience participants from different cultural backgrounds and other stakeholders such as streamers, MCNs, streaming platforms, game developers, and other relevant organizations to further inquire into proxy play, for instance, the migration of gamers from proxy play to direct play and vice versa; whether proxy play is otherwise a degeneration of play caused by collective fatigue and resistance of players from the exploitative gaming labor and monetization or maniac consumerist media industry.

Appendix A: Survey Consent

E-Consent Form to Participate in Research for Studies of Video Gaming Habits

Key Information

Introduction

This research study is conducted by Yue Gu of the Asian/Pacific Studies Institute at Duke University in the United States.

Why is this study being done?

The purpose of this study is to find out video gamers' habits and preferences, helping us understand the trend(s) and user behaviors in the Chinese online gaming community.

What will I be asked to do?

If you choose to take part in this study, you will be completing a survey questionnaire that involves multiple choice questions, rating scale, and ranking questions about your video game playing habits and preferences as well as some basic demographic questions without direct identifiers (e.g., names or IDs).

How long will I be in the study?

We expect your participation in the study to last 8 to 15 minutes.

What are the risks and inconveniences and benefits of this study?

There are no expected risks or benefits to you for participating in this research study.

Compensation Example:

You will receive a ¥ 1- ¥ 5 compensation after your survey responses are reviewed and verified. Please note you must answer every question to be compensated.

Confidentiality:

If you choose to participate, we will need your online transaction accounts for payment purposes. We will keep this signed consent form in a secure location separate from your data. A unique code number will be assigned to all data we collect from you. Online transaction accounts of the participants will be collected via survey and stored on the researcher's password-protected computer **that meets Duke minimum information security standard as shown on the webpage *https://security.duke.edu/policies-procedures-and-standards/device-security/minimum-security-standards-laptops-desktops/*** for compensations afterwards. The information about the online transaction account IDs will be deleted from the researcher's password-protected computer after the compensation is completed. All other data about the participants gained from the interviews and the survey will be stored in Duke University's secure cloud-platform, Duke Box. While the data we collect from this study may be presented at scientific meetings or published in a scientific journal, your identity will not be revealed. Collected data may be made public or used for future research purposes, your identity will always remain confidential. The study results and documentation will be retained for at least six years after the study is completed.

Voluntary nature of participation:

Participation in this study is voluntary. You can choose not to participate. If you agree to be in the study, you may withdraw at any time for any reason. While you can skip questions you do not want to answer, you must answer every question as a condition of compensation. If you skip any questions you will not be compensated.

Whom do I call if I have questions or problems?

For questions about the study, email Yue Gu at yue.gu@duke.edu. For questions about your rights as a participant in this research study, contact the Duke University Campus IRB at 919-684-3030 or campusirb@duke.edu. or 919-684-3030. If writing to the Campus IRB, please reference protocol ID# 2023-0042.

Statement of Consent

If you agree to take part in the study, please click on "Yes" below and continue to the survey.

□ Yes

□ No

Date: _____

Appendix B: Survey Outline

**Note: Since the target group is the Chinese gaming community, the survey will be conducted in Chinese. The English version as follows is an authentic translation of the Chinese one for review.*

Hi! Thank you for your interest in my research survey. This is a survey about video gamers' habits and preferences, mainly to help us understand the trend(s) and user behaviors in the Chinese online gaming community. The information you provide will become an important basis for our research on the Chinese online gaming community. If you are interested in this survey, please take a few minutes to review the informed consent process before agreeing to participate in my research.

[Method: online survey]

PART 1:

1. How often do you play video games (PC/console/mobile games) in the past month? (Jump to the end if the answer is "Once every three weeks or less")

□ Once or twice per week

□ 3-4 times per week

□ 5-7 times per week

□ Every two weeks

□ Once every three weeks or less

2. How long do you typically spend on playing games at a time?

□ Below 30 minutes

□ Between 30 and 59 minutes

□ From 1 hour to 2 hours

□ Above 2 hours

3. What type of games do you often play in the past year? (Choose as many as you like)

□ Action & Shooting (e.g., First-Person Shooter, Third-Person Shooter, Hack & Slash, Fighting & Martial Arts)

□ Battle Arena (e.g., MOBA/Asymmetric Competition)

□ Music & Rhythm

□ Mystery & Puzzle (e.g., Interactive Novel, Detective, Mystery)

□ Role-Playing (e.g., MMORPG, Action RPG, Adventure RPG, Japanese RPG, Party-Based, Rouge-Like, Strategy RPG, Turn-Based RPG)

□ Survival & Sandbox (e.g., Battle Royale, Escaping)

□ Simulation (e.g., Space & Flight, Life & Immersive, Hobby & Job, Farming & Crafting, Building & Automation, Dating)

□ Sports & Racing

□ SLG (e.g., Real-Time Strategy, Turn-Based Strategy, Tower Defense, Military, Card & Board, City & Settlement, Grand & 4X)

□ Casual (e.g., Tile-Matching/Chess/Mini-Program)

□ Card & Board (e.g., Party-Based/Tabletop)

□ Platform

4. How much of a concern are the following elements to you when playing games?

(Please rank the following facets from the most to the least important.)

I. Narration & Storyline

II. Tactics & Strategic Thinking

III. Simulation & Immersion

IV. Competition & Achievement

V. Virtual World Exploration & Interaction

VI. Cooperation (playing with friends) & Socialization (making new friends)

VII. Crafting & Creativity (DIY)

VIII. Collection & Assets

IX. Skill Building & Self-Challenge

X. Sensual Enjoyment (e.g., visual effects, audio music, touch)

XI. Mystery Solving & Detection

XII. Adrenaline & Excitement from Uncertainty & Fortune

5. How much have you spent on playing games in the past year?

□ ¥ 0-500

□ ¥ 501-1000

□ ￥1001-5000

□ ￥5001-10000

□ Over ￥10000

6. Which items do you usually pay for in games? (Choose as many as you like)

□ Hardware purchased specially for gaming (Gaming PCs, Hard Drive, Game Consoles, Game Controllers, Game Headsets, Sound Systems, Gaming Keyboard/Mouse, and Game Desk/E-Sports chair, etc.

□ Official Game Titles (Pay-to-Play Games)

□ Battle Pass/Game Bundles/DLCs

□ Weekly/Monthly Membership & Gift Packs

□ Box Opening/Card Drawing

□ In-Game Characters, Weapons, and other Leveling-Up Items

□ In-Game Costumes and Accessory

□ In-Game Gifting & Community Socialization

□ Coaching, Playmates, & Game Account Trading

□ Real Game Derivative Products

7. Which of the following words best describes your game competence?

□ Novice (I can only play casual games as tile-matching games, card games, and mini-program games, etc.)

□ Regular gamers (I cannot play too complicated games.)

□ Amateur (I can play most games and achieve medium ranks)

□ Expert (I can master most games quickly and rank high in games)

□ Professional (e.g., e-sports players and some game streamers)

8. How often do you watch game live streaming in the past month? (Jump to the Q if the answer is "None")

□ 5-7 times per week

□ 3-4 times per week

□ 1-2 times per week

□ Every two weeks

□ Every month

□ None

9. Which of the following platforms do you usually watch game live streaming on? (Choose as many as you like)

□ Douyu TV

□ Huya TV

□ NetEase CC

□ Bilibili

□ Douyin

□ Kuaishou

□ Zhanqi

□ YY

□ Other__

10. What type of game live streaming do you mainly watch? (Choose as many as you like)

□ Amateur Streamers' Solo/Random Matching Games

□ Streamers Teaming Up

□ Official Live Streaming of Game Competitions/Awards/Conferences

□ Streamers and Audience teaming up/friendly matches

□ Streamers' Trying New Game Demos/Beta Versions

□ Professional E-Sport Players' training

□ Game Launching/Game Developers' sharing

□ Others__

11. Do you play the games that you mainly follow in game live streaming?

□ Yes, I play the game(s) myself.

□ No, I don't play the game(s).

12. What would you typically do during game live streaming? (Choose as many as you like)

□ Focusing on the game content

□ Learning gaming techniques

□ Not Much Interaction (Just Watching)

□ Participating in game-related discussion/polling (Game analysis/result prediction, etc.)

□ Doing other activities at the same time (e.g., opening other webpages/apps while playing the streaming in the background play or a video pop-out)

□ Proposing/discussing non-game-related topics

□ Paying attention to streamers' personal updates

□ Co-playing games with streamers/other audiences through sending danmuku/voting

□ Gifting/supporting streamers (e.g., Sending virtual gifts/donating Money, etc.)

□ Others__

13. About how much RMB yuan have you spent on game live streaming?

□ >10000

□ 5001-10000

□ 1001-5000

□ 201-1000

□ 1-200

14. What puts you off during game live-streaming? (Choose as many as you like)

□ Disputes among the audience (trolling/provocative speech/spamming)

□ Pressure on monetization (Over or undue inducements by streamers for gifting or money)

□ Audience's interference in streamers' gaming (Purposeful matching/screen peeping)

□ Low-quality graphics/sounds

□ Lack of or low-quality interactions between live streamers and the audience

□ Poor Game Performance of live-streamers or other players (Poor skills/attitudes)

□ Streamers' low morality or controversial values/speech/deeds

□ Others___

Thanks for your interest in taking part, please tell us more about you.

PART 2:

1. How old are you?

□ 12 or younger

□ 13-18

□ 19-29

□ 30-38

□ 39-49

□ 50 or older

2. What's your gender?

□ Female □ Male □ Nonbinary

3. What is the highest level of education you've completed?

□ Primary School

□ Middle School

□ High School

□ College/University Diploma

□ Master/Graduate Degree

□ Doctorate

4. What's your monthly income (in RMB yuan)?

□ ¥ 2,000 or less

□ ¥ 2,001 - 4,999

□ ¥ 5,000 - 9,999

□ ¥ 10,000 - 20,000

□ ¥ 20,001 - 39,999

□ ¥ 40,000 or above

□ Enrolled student

□ Non-student without regular incomes

Appendix C: Interview Consent

E-Consent Form to Participate in Research for Studies of Video Gaming Habits

Key Information

Introduction

This research study is conducted by Yue Gu of the Asian/Pacific Studies Institute at Duke University in the United States.

Why is this study being done?

The purpose of this study is to find out video gamers' habits and preferences, helping us understand the trend(s) and user behaviors in the Chinese online gaming community.

What will I be asked to do?

If you choose to take part in this study, you will participate in an interview (remote or in-person, depending on your preference) that involves multiple open-ended questions asking information about your experience in and opinions about watching game live streaming and playing video games. No video or audio will be recorded during the interview.

How long will I be in the study?

We expect your participation in the study to last around 60 minutes.

What are the risks and inconveniences and benefits of this study?

There are no expected risks or benefits to you for participating in this research study.

Compensation Example:

You will receive a ¥ 80-100 compensation depending on your participation time and travel fees (if any) after a participant completes the interview.

Confidentiality:

If you choose to participate, we will need your online transaction accounts for payment purposes. We will keep this signed consent form in a secure location separate from your data. A unique code number will be assigned to all data we collect from you. Online transaction accounts of the participants will be collected via survey and stored on the researcher's password-protected computer that meets Duke minimum information security standard as shown on the webpage *https://security.duke.edu/policies-procedures-and-standards/device-security/minimum-security-standards-laptops-desktops/* for compensations afterwards. The information about the online transaction account IDs will be deleted from the researcher's password-protected computer after the compensation is completed. All other data about the participants gained from the interviews and the survey will be stored in Duke University's secure cloud-platform, Duke Box. While the data we collect from this study may be presented at scientific meetings or published in a scientific journal, your identity will not be revealed. Collected data may be made public or used for future research purposes, your identity will always remain confidential. The study results and documentation will be retained for at least six years after the study is completed.

Voluntary nature of participation:

Participation in this study is voluntary. You can choose not to participate. If you agree to be in the study, you may withdraw at any time for any reason.

Whom do I call if I have questions or problems?

For questions about the study, email Yue Gu at yue.gu@duke.edu. For questions about your rights as a participant in this research study, contact the Duke University Campus IRB at 919-684-3030 or campusirb@duke.edu. or 919-684-3030. If writing to the Campus IRB, please reference protocol ID# 2023-0042.

Statement of Consent

If you agree to take part in the study, please click on "Yes" below.

□ Yes

□ No

Date: _____

Appendix D: Interview Outline

**Note: Since the target group is the Chinese gaming community, the interview will be conducted in Chinese. The English version as follows is an authentic translation of the Chinese one for the IRB review.*

Hi! Thank you for your interest in my research interview. This is an interview about video gamers' habits and preferences, mainly to help us understand the trend(s) and user behaviors in the Chinese online gaming community. The information you provide will become an important basis for our research on the Chinese online gaming community. If you are interested in this survey, please take a few minutes to review the informed consent process before agreeing to participate in my research.

[Method: online/offline interview]

- What games do you usually play?
- What makes you or in what cases do you turn to game live streaming?
- How do you usually feel when watching game live streaming and why?
- What makes you like or dislike to watch game live streaming? What's your opinion about game live streaming?
- Do you find any differences between watch game live streaming and play games by yourself?
- How you understand the concept of "Cloud Player"?

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