

Univerzita Hradec Králové
Pedagogická fakulta
Katedra výtvarné kultury a textilní tvorby

Model Sheet postav pro videoherní projekt

Bakalářská práce

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Studijní obor:	Grafická tvorba – multimédia
Vedoucí práce:	Mgr. et MgA. Pavel Trnka
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Zadání bakalářské práce

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V teoretické části se tato bakalářská práce zabývá technikami a pracovními postupy, které se používají ve videoherním průmyslu – konkrétně na pozici kreslíře a návrháře charakterů. Zkoumá pracovní úkoly, které má Concept Artist na starosti a jejichž výstupem je mimo jiné Model Sheet. To znamená, že řeší tvar těla, stylizaci, gesta, výrazy, oblečení, rekvizity, barvy, psychologii a další specifika herního charakteru. V praktické části autorka rámcově rozpracovává vizi autorského herního projektu a předkládá tři kompletní kreslené návrhy herních charakterů včetně jejich fiktivního životopisu a kompletní 2d vizualizace.

3dtotal Publishing (ed.) *Character Design Quarterly 12*. Worcester, England: 3DTotal Publishing, 2020a. ISBN-13: 978191284302

3dtotal Publishing (ed.) *Character Design Quarterly 14*. Worcester, England: 3DTotal Publishing, 2020. ISBN-13: 9781912843046

CROSSLEY, Kevin. *Character design from the ground up*. London, England: Ilex, 2014. ISBN-13: 9781138428126

KENNEDY, Sam R. *How to become a video game artist: The insider's guide to landing a job in the gaming world*. Watson-Guption Publications, 2013. ISBN-13 9780823008094.

LILLY, Elliott J. *The big bad world of concept art for video games: An insider's guide for students*. Culver City, CA: Design Studio Press, 2015. ISBN-13: 9781624650369

SILVER, Stephen. *The silver way: Techniques, tips, and tutorials for effective character design*. Culver City, CA: Design Studio Press, 2017. ISBN-13: 9781624650345

Zadávací pracoviště: Katedra výtvarné kultury a textilní tvorby,
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Prohlášení

Prohlašuji, že jsem tuto bakalářskou práci vypracovala pod vedením vedoucího bakalářské práce samostatně a uvedla jsem všechny použité prameny a literaturu.

V Hradci Králové dne

Anotace

DOLEŽALOVÁ, Nikola. *Model Sheet pro videoherní projekt*. Hradec Králové: Pedagogická fakulta Univerzity Hradec Králové, 2022. 60 s. Bakalářská práce.

Tématem mé bakalářské práce je Model Sheet pro videoherní projekt. Obsahuje dvě části, a to teoretickou a praktickou. V teoretické části se tato bakalářská práce zabývá technikami a pracovními postupy, které se používají ve videoherním průmyslu – konkrétně na pozici kreslíře a návrháře charakterů. Zkoumá pracovní úkoly, které má Concept Artist na starosti a jejichž výstupem je mimo jiné Model Sheet. To znamená, že řeší tvar těla, stylizaci, gesta, výrazy, oblečení, rekvizity, barvy, psychologii a další specifika herního charakteru. V praktické části autorka rámcově rozpracovává vizi autorského herního projektu a předkládá tři kompletní kreslené návrhy herních charakterů včetně jejich fiktivního životopisu a kompletní 2d vizualizace.

Klíčová slova: Concept Art, Model Sheet, Character Design, Illustration, 2D grafika, Ilustrace pro hry, tvorba, videohry, ilustrace, barvy, příběh.

Abstrakce v českém jazyce

Tématem mé bakalářské práce je tzv. Model Sheet, tedy především výtvarně ale i z mnoha jiných hledisek zpracovaný návrh herní postavy. Postavy tvoří spolu s herním prostředím a rekvizitami základ herních projektů a mým dlouholetým cílem je připravit se profesně na pracovní pozici designérky, která se na tvorbu Model Sheets specializuje.

Proč jsem zvolila právě Model Sheet? Na prvním místě byl můj zájem o techniku digitální grafiky, se kterou se seznamuji už od střední školy. Vždy jsem ráda tvořila, malovala a kreslila, ale náhle se před mýma očima otevřela profese, díky které bych se tomuto umění mohla věnovat na plný úvazek. Zpočátku jsem měla dojem, že jde o žánr, kterým ještě není ovlivněno příliš mnoho lidí, a tak jsem se zabývala otázkou, jak velká je v Evropě poptávka po tomto druhu tvorby. Ukázalo se, že v Česku mnoho lidí vlastně vůbec neví, jak toto odvětví funguje či že vůbec existuje. V zahraničí je situace lepší, a to zejména v USA, kde sídlí nejvíce vývojových herních společností. Rozhodla jsem se tedy hlouběji ponořit do podstaty tématu a čtenářům tak poodhalit, jak to celé vlastně funguje.

Druhým důvodem mého zájmu je právě fakt, že vědomě či nevědomě jsme já i celá moje generace herním průmyslem výrazně ovlivněni. Tímto vlivem ale rozhodně nedisponuje každý herní titul. Je k tomu zapotřebí dílo zdařilé po všech stránkách. Například nestačí, aby hra fungovala dobře jenom po stránce technické. Pokud není i vizuální složka stejně dokonalá, prodej hry se sníží a vliv takového díla je zanedbatelný nebo vůbec žádný. Jinými slovy, žádná skvělá hra se neobejde bez dobré vizuální stránky. Ať už se jedná o staromódní RPG nebo nejnovější FPS – za vším je vždy mimořádně talentované umělecké oddělení. A co víc, existují zde různé výtvarné směry, jako tomu bylo v minulosti třeba v malířství nebo architektuře. Nyní se prosazuje zejména semi-realismus nebo výrazná stylizace.

Ve své bakalářské práci tyto cesty a směry, kterými se herní studio může vydat, rozebírám a popisuji. Směr, který preferuje technickou stránku, se intenzivněji zabývá herní mechanikou, využitím technických novinek nebo výrobou hry. Ve výtvarném či vizuálním směru se klade větší důraz na vzhled komponentů, animace, grafických prvků apod. Přitom v rámci vizuální stylizace odlišujeme ještě plošný 2D ilustrativní koncept postav, animací a designu či propagačních materiálů. Vedle něj existuje třídimenzionální (3D) styl, který je plně prostorový a jehož modely a animace mohou v podstatě existovat jen v prostředí hry. 3D tisk a robotika jsou sice na vzestupu, ale konzumace 3D obsahu hry mimo herní

zařízení je i tak stále jen obtížně představitelná. Tak jako tak si myslím, že je nezbytně nutné, abychom se více zajímali o prudce se rozvíjející herní obor, který se navíc velmi rychle proměňuje společně se vkusem progresivní mladší generace.

Primární ambicí této práce tedy je, aby rozšířila mé umělecké portfolio a poskytla mi cenné teoretické i praktické zkušenosti pro vytváření herních komponentů a herního konceptu jako takového. Z toho důvodu jsem se snažila vyjádřit a rozpracovat i vizi mé vlastní (autenticky mé) počítačové videohry, kterou bychom si já osobně nebo moji přátelé rádi zahráli. Žijeme v době, kdy je možné vše nebo až neuvěřitelně mnoho. Jestliže jsou ale naše možnosti neohrazené, jsou stejně velká i rizika. Kde jsou nekonečné možnosti, tam jsou také i příležitosti k chybám a těch se nutně musíme vyvarovat.

V teoretické části se tato bakalářská práce zabývá technikami a pracovními postupy, které se používají na pozici kreslíře a návrháře charakterů pro herní design. Úplným základem je dostatečná orientace ve 2D softwaru. Tyto programy jsou zaměřeny na umělce, kteří kreslí, malují, případně vytváří vlastní komiksy, a je jich na trhu velké množství. Já preferuji Clip Studio Paint, což je relativně nový program (letos slaví 10 let od prvního zveřejnění). Těší se značné míře popularity například mezi youtubery a lidmi na Twitteru. Je to levnější verze Photoshopu, protože jde o jednorázovou koupi. Ale existují i další, ještě levnější varianty, například Krita, která je zcela zdarma. Za zmínku stojí, právě posledně jmenovaný software, protože nabízí i možnost 2D animace, ovšem trpí častými haváriemi, takže se musí neustále ukládat a využívat s větší opatrností. Clip Studio Paint také poskytuje možnost animace, je stabilnější, a dokonce nabízí nesmírně užitečné 3D modely usnadňující kresbu prostorových objektů a anatomie. Dokonce zde lze pracovat s osvětlením a stíny ve 3D scéně. Tím se dostáváme k pokročilejšímu profesionálnímu softwaru – k oblasti třídídimenzionální grafiky. Mezi takové nástroje patří 3ds Max, Maya, Cinema 4D nebo freeware Blender. Tyto technologie jsou používány jak profesionály, tak i lidmi, kteří to neberou vážně ale spíše jako hobby. Pro studenty jsou v této oblasti vždy k dispozici významné slevy, protože výrobci spoléhají, že po absolutoriu zůstanou věrni právě jejich značce. U 3D softwaru díky jeho komplexní náročnosti není snadné přecházet od brandu k brandu. Míra vzrůstající technické náročnosti je ale tak významná, že většina kreslířů práh 3D modelování nikdy nepřekročí. Existuje sice skupina umělců, kteří umí jak kreslit tak ovládat některý 3D software, ale nejčastěji jde o dvě oddělené skupiny lidí. 3D grafici a designéři se obvykle zase rádi vyhýbají nutnosti kreslit.

Ačkoliv historie vývoje videoher prakticky začíná až s existencí počítačů, můžeme najít podstatné milníky už o mnoho let dříve. Například ve 40. letech 20. století, kdy existovaly velmi jednoduché a primitivní deskové, karetní nebo šachové hry, tvořila už podstatnou část jejich designu nádherná vizuální stránka a byly levné díky velmi rozšířené technologii barevné polygrafie. První videohrou byl patrně „Tic-Tac-Toe“, první střílečkou byl „Spacewars!“ Teprve v osmdesátých letech však technologie postoupila natolik daleko, že bylo možné pozorovat malé náznaky designu postav. Jako jedno z prvních vizuálně zajímavých děl bych zmínila hru Pac Man. Na začátku 90. let se zrodily výtvarně již legendární hry jako byl Super Mario Bros. Vývoj her pak pokračoval stále rychleji až do dnešní doby, kdy zájem o hraní roste každým okamžikem. Nabídka herních titulů je už tak obrovská, že může zaujmout v podstatě kohokoliv. Proces gamifikace se stále intenzivněji rozšiřuje i za hranice oblasti zábavy. Bylo zjištěno, že pokud má hra výukový obsah, dá se jí využít i ve vzdělávání, propagaci a kdekoliv jinde.

Tzv. Concept Art (pozor, tento termín nelze přeložit jako konceptuální umění) v oblasti herního průmyslu je umělecké odvětví, které stojí na počátku transformace myšlenek a představ autorů příběhu do vizuální materializované podoby. Existuje zde řada dílčích profesí, ve kterých se mohou umělci jako já uplatnit. Jde obvykle o autory skic postav, prostředí a rekvizit, které jsou postupně zpřesňovány a vyvíjeny až po kompletní 3d modely včetně veškerých nutných detailů. Vzniká tak jakási souhrnná vizuální reprezentace hry, která vypráví příběh nebo zprostředkovává jasnou představu pro celý vývojový herní tým. Při této práci se samozřejmě bere ohled i na cílovou skupinu, tedy na budoucí herní publikum.

Koncepční návrhy lze obvykle vytvořit velmi rychle, v některých případech mohou být načrtnuty dokonce během několika minut. V této fázi je velmi důležitý autokritický přístup, neboť vývojový tým musí zvážit atraktivitu, jakou bude výsledné dílo působit. Jeho povinností je hledat ty nejefektivnější vizuály, které budou sto následně vytvořit vybroušený herní projekt. Ten musí přilákat to správné publikum a být pro něj opravdu velkým zážitkem, na který se nezapomíná. Když se totiž finální návrh nepovede, ačkoliv tým věnoval dílu několik měsíců práce a času, může to studiu způsobit finanční katastrofu, a ta může přivodit jeho faktický krach. Oproti tomu nepovedený koncepční kousek nebude tak velká ztráta, a proto je dobrým zvykem concept artistů vytvářet vždy více alternativ, ze kterých se vybírá ta opravdu nejlepší a nejvíce schopná naplnit ideály rozpracovaného projektu. Elliot Lily vytvořil graf na základě průměrné doby produkce tří let. Nejčastěji podle

něj trvá preprodukční fáze šest měsíců až jeden rok, pokud je vedení společnosti v jedné ruce. Jestliže se majitelé mění, může trvat i déle.

Dříve byly hry velmi jednoduché, ale s jejich popularitou se stávají stále složitější po všech stránkách. Protože, jak jsem zmínila, existuje mnoho odvětví, žánrů a stylů, měl by si umělec vybrat, kterou z cest se chce vydat. Buď se specializovat a dosáhnout absolutní dokonalosti v některé konkrétní profesi, to se vyplatí pro práci v těch největších herních studiích, nebo být spíše univerzální, ovládat jak kresbu, tak 3d grafiku a mnoho dalšího pro práci v těch malých. I když se to nezdá, je poptávka po práci concept artisty neuvěřitelně vysoká. Jistou míru flexibility však musí zvládnout každý už jen proto, jak rychle studia zanikají a přeskupují se ve studia nová. I vývoj technologií tuto otevřenější strategii podporuje, neboť se mění každý den. Úspěšnější jsou také tvůrci, kteří srší nápady a originálními řešeními, než lidé, kteří jenom kopírují a napodobují ostatní. Každý z nich musí umět svou práci dobře předvést a tím ji takzvaně dobře „prodat.“ Zkušení senioři vám mohou poreferovat, jak drastickým změnám v průběhu let museli čelit, když se herní průmysl vyvinul do dnešní podoby. Poptávka se posunula od pouhé dobré znalosti anatomie ke kritickému myšlení, kreativitě, schopnosti ovládat digitální software, flexibilitě a porozumění. V neposlední řadě je nutné, aby concept artist chápal i širší technická herní omezení postavy, kterou vyvíjí, nebo třeba, aby uměl práce zanechat, pokud si to přeje jeho nadřízený, ačkoliv by sám ještě rád daný charakter dále rozvíjel (například, když hoří termín apod). Součástí týmové práce je vždy i brainstorming a vzájemná konstruktivní kritika, což jsou další nezbytné součásti know-how umělce v tomto výtvarném oboru

Návrhy postav by měly být vždy atraktivní, esteticky vzrušující a zapamatovatelné. Měly by pomáhat vyprávět příběh dané hry a přispívat celkové k náladě a poselství díla. Postup práce začíná u tzv. *mood boardu* či *reference boardu*, což jsou tabule s referenčními obrázky k vytvoření nového designu věci, na které pracujeme. Mood board inklinuje spíše k popisu celkové barevnosti a nálady, zatímco reference board řeší anatomické a technické detaily realizovaného díla. Úkolem umělce je se v nich inspirovat a poučit avšak přímo nekopírovat. Tyto referenční tabule představují určitou znalostní bázi nebo vizuální knihovnu, která respektuje příběh a která tvůrce „drží při zemi,“ aby se od něho příliš neodchylovali.

Proces tvorby přináší otázky jako: Kdo je naše postava? Jaká je kultura, ze které pochází? Jaká byla minulost postavy a jakými lidmi bývá obklopena. A to vše s cílem, aby charakter působil zcela přirozeně, abychom se v něm takřikajíc mohli najít. K jeho charakterizaci pak patří celá řada věcí – siluety, barvy, ale i gesta, která bude používat.

Před hotovým dílem je vedoucímu týmu předloženo mnoho návrhů postav. Právě siluety často tvoří jeden z hlavních faktorů výběru. Nemá-li postava výrazně odlišný obrys, může snadno dojít k její záměně a hráči se budou při hře obtížněji orientovat. Celkově je vědomá práce s těmito aspekty velmi důležitá. Každý tvar divákovi evokuje jiný pocit, což lze snadno demonstrovat například na kontrastu působení tvarů zaoblených a tvarů ostrých. Přitom je promyšlenost těchto detailů podstatná nejen u postav, ale také u designu prostředí, rekvizit nebo grafického rozhraní hry.

Primární vliv na city má barevná paleta, kterou pro model vybereme. Kombinace dobré siluety a správně zvoleného barevného schématu se rovná dobře zapamatovatelnému charakteru. Existují velmi propracované systémy komponování barev založené především na tzv. barevném kruhu. Protilehlé barvy vytváří největší kontrast, barvy sousedící naopak inklinují k barevné harmonii. Jedna barva by měla být na postavě vždy dominantní, ostatní je nutné potlačit nebo úplně neutralizovat.

S tím souvisí i charakteristické pohyby nebo gesta a mimika obličeje postav. Všechny tyto rysy bývají zpravidla ještě značně zdůrazňovány, aby byly pro diváka čitelnější a aby vyvolávaly silnější emoce (v dané situaci). Dalším neméně významným důvodem pro nadsázku jsou i výhody, které tvůrcům plynou z výjimečné osobitosti nově připravované hry. Její odlišnost poskytuje nezapomenutelný zážitek, protože se hráčům v paměti uloží dostatečně daleko od dojmů z her ostatních. Tato gesta, mimické výrazy a pohyby shromažďují animátoři v rozsáhlých knihovnách a cíleně je nasazují do situací, ve kterých se herní charakter ocitá. Pro přehlednost (je jich veliké množství, připravují se totiž předem) si je třídí do složek a označují asi palec velikými obrázkovými náhledy, podle kterých je vyhledávají.

Model sheet pro hru se mírně liší od podobného návrhového listu pro animaci. Obecně vzat je návrh pro hru méně rozpracovaný do různých detailů tzv. „extrémních poloh“ charakteru, které jsou důležité pro animaci. Model sheet si vystačí s limitovaným počtem výrazů a spíše se zaměřuje na varianty oblečení, na rekvizity a na barevnou paletu postavy.

V obou případech jsou tyto návrhové výkresy postav zpracované tak, aby byly jasné a čitelné pro celý další tým. Popis se omezuje na úplně minimum.

V praktické části jsem popsala příběh a prostředí, ve kterém se moje hra odehrává. Jako dějiště jsem zvolila fiktivní svět, ale zeměpisně jsem se od reálně existujících území příliš nevzdalovala. Příkladám celkem tři rozsáhle zpracované charaktery v mnoha pozicích a s příhodnými oděvy. Hlavním hrdinou mé hry je vojenský zdravotník. Má krycí jméno Doc a je součástí soukromé vojenské společnosti Fenrir. Pro svou bezpečnost používá ochrannou kuklu včetně masky, již zakrývá svou pravou identitu. Antagonistu v mé hře představuje žena, bývalá vojenská vědkyně, která se stane obchodnicí se zbraněmi. Vytvořila si vlastní společnost a najala pro ni elitní vojáky. Jmenuje se Athena Leroy. Poslední realizovanou postavou je jeden z elitních vojáků Athena Corporation. Faktem je, že mé postavy nejsou nutně zlé, spíše neutrální.

Příběh se odehrává ve 21. století (toho jsem se snažila držet, ale nenechat se příliš unést do futuristické nálady). Američtí federálové získali (než bylo spojení se špiónem přerušeno) nekompletní část informace, že majitel Athena Corporation (dále jen „korporace“) plánuje vyrobit dosud nejnebezpečnější existující biologickou zbraň. Protože federální úřady nemohou poslat své vlastní lidi (aby okamžitě neupadli v podezření a nebyli sledováni) najmou si soukromou vojenskou společnost Fenrir, aby zjistila, co se stalo se špiónem a co je s tajnou zbraní. Dalším cílem pak je tuto zbraň zničit nebo ji alespoň dopravit na místo předání, kde si ji už zničí sama vláda.

Sídlo korporace se nachází na ostrově, kam je možné se dostat pouze letecky nebo vodní cestou. Povaha a osud Atheny Leroy byl už popsán výše, proto jen zmíním, že sama svůj antagonismus vysvětluje tím, že její vědecká práce byla armádou zanedbávána, nedostatečně ohodnocena, a proto hodlá využít své znalosti kdekoliv jinde, kde z toho bude mít o hodně větší prospěch. Nyní je rozhodnuta zlikvidovat každého, kdo se jí pokusí v jejích záměrech postavit.

Soukromá vojenská společnost Fenrir, posílá Alpha jednotku, která obsahuje pět členů (velitele jednotky Doce a další tři vojenské specialisty). Majitel Fenriru si je sám osobně vybral. Fenrir věří, že mise bude splněna bez ohledu na obtížnost.

Ke shromáždění *referenci* a jejich ukládání do složky jsem používala web s názvem Pinterest. Referenční deska vojáka korporace představuje muže, který má za sebou dvacetiletou aktivní službu a nyní je stále zkušený, bojeschopný ale oficiálně ve výslužbě. Říká se tomu voják PMC. Fenrir bude mít uniformy případně oblečení ryze neformální, aby mohli pracovat v utajení. Jako inspirace mi mimo jiné posloužila soukromá armáda Blackwater. Pro Athenu jsem zvolila bílé oblečení. V raných fázích vývoje jsem váhala mezi postavou ostřelovačky a velmi elegantní dámy, která má ráda jednoduchost. Při tvorbě a přemýšlení jsem poslouchala francouzskou hudbu, která se mi k ní z nějakého důvodu zdála nejvíce adekvátní. Při vytváření negativní postavy padoucha jsou typické tmavé barvy – například černá či zelená. Já jsem se rozhodla pro bílou, abych skryla, kým Athena ve skutečnosti je a naznačila, že ona si přímo ruce „nešpiní,“ že tuto podřadnou práci nechává za sebe vykonávat jiné. Vypadá tedy jako anděl, avšak ráda přitom tahá za nitky zlých záměrů. Athenina bezpečnostní služba a oblečení komanda Fenriru jsou si dost podobné. Doc ale používá plynovou masku jako ochranu před chemikáliemi a je v černé, aby dobře kontrastoval s postavou antagonistky.

Celkově tvorba postav nebyla tak jednoduchá, jak se očekávalo. Doc prošel celou řadou úprav a předělávek, přičemž jeho současná podoba pochází z pozdějších nikoli původních návrhů. Roli hrálo i vybavení, konkrétně vaky pro klip na náboje.

Nejpropracovanější a nejvíce komplikovaný byl právě Athénin design. Počáteční fáze byly zaměřeny na její původní vojenskou profesi ostřelovačky. Jakmile jsem byla spokojena s přechodem na business casual oblečení, skončila jsem s designem, protože mi připadal komplikovaný a nikoli jednoduchý, jak jsem si přála. Po dokončení designu jsem se zabývala postavou Doc, ale následně jsem se opět vrátila k Athéně, abych si pro jistotu znovu ověřila, jak působí.

Tehdy jsem změnila její stylizaci coby ostřelovačky směrem k vyjádření její profese vědkyně podnikající v oblasti chemických zbraní. Oblečení jí v podstatě zůstalo beze změn, rukavice, brýle a kabát tím pádem v podstatě fungují jako její vizuální podpis.

Athéniny vojáky jsem navrhovala se záměrem je co nejvíce odlišit od hlavního hrdiny. Charakteristickým znakem bylo mimo jiné lehké brnění. Celkem jsem vytvořila tři návrhy vojáků.

Vytvořit koncept originální hry od počátku do konce pro mne nebylo jednoduché. I když jsem se soustředila na design postav, musela jsem přijít s novou myšlenkou, sestavit základní příběhový rámec, zvolit herní žánr, lépe zvládnout software Clip Studio Paint a alespoň rámcově zvažovat i základní herní mechaniku. Myslím si, že čas, který jsem měla k dispozici, jsem využila na maximum. Pokud by ho bylo ještě více, mohla bych uvažovat také o zpracování postav ve 3D provedení. K tomu však nakonec nedošlo, neboť jsem pro teoretickou část musela prostudovat celou řadu materiálů o fungování profesionálního herního studia a o rolích konceptuálních designérů v něm. Veškeré odborné materiály jsem následně zpracovala v anglickém jazyce, což je další z nezbytných pilířů přípravy budoucího concept artisty, kterým se chci stát.

Novým prvkem mé práce byla i konzultace výsledků mé tvorby s obecními, které mi poskytovalo otevřenou zpětnou vazbu na kresby postav v rámci tohoto projektu. Šlo o společenství nadšenců, kteří se podobně jako já vážně i méně vážně připravují na kariéru v herním průmyslu.

Byla jsem vděčná za tuto pomoc, i když názory ostatních se často velmi lišily a shoda panovala jen v některých zřejmě nejpodstatnějších věcech. Poznání, jak odlišný má každý vkus, pro mě bylo stejně podstatné, jako nabytí odvahy předkládat svou práci k pravidelnému hodnocení a nutnost se s kritikou ostatních konstruktivně vyrovnávat. Nesměla jsem při tom ztratit vůli pokračovat, učit se nové věci, úsilí stále se zlepšovat, ani jsem nesměla ztratit ze zřetele svůj hlavní cíl – hledat skutečně optimální umělecké řešení

Celkem jsem takto prokonzultovala přes čtyřicet vlastních návrhů postav, čímž jsem vyhověla další podmínce concept artu, tedy vytváření velkého množství návrhů v preprodukční fázi, kdy následky nezdarů firmě ještě nepřinášejí žádné katastrofální finanční náklady navíc.

Po dokončení projektu jsem si uvědomila i některé drobné chyby a věci, které bych mohla zlepšit. Kdybych měla více zkušeností nebo více takových projektů, přistupovala bych k jejich realizaci poněkud novým způsobem. Za všechny nové zkušenosti bych chtěla zdůraznit dvě: Předně musím trávit méně času nad referenční tabulí (reference board), měla bych rychleji přistoupit k tvorbě jako takové. Dále se musím naučit lépe a striktněji nastavovat a dodržovat časové hranice pro vývoj každého z charakterů, protože příliš detailní

dokončování postavy není tak cenné jako vzorování postav nových. Zvládnutí obou těchto bodů by podle mého názoru mělo významně zvýšit ekonomičnost mé práce a posunout mě blíže k mým profesním cílům.

V blízké budoucnosti bych na celý tento svůj projekt velmi ráda získala zhodnocení a kritiku od některého renomovaného specialisty na concept art, který si již svou pozici v herním průmyslu vydobyl a který by byl svolný se se mnou o své zkušenosti podělit. V ideálním případě bych ráda našla člověka, který by byl ochoten stát se mým mentorem a provázet mě nejen tímto, ale i budoucími herními projekty, které mě doufám v budoucnosti čekají.

Annotation

DOLEŽALOVÁ, Nikola. *Model sheet for video game project*. Hradec Králové: Faculty of Education, University of Hradec Králové, 2022. 60 p. Bachelor Degree thesis.

The topic of my bachelor thesis is the Model Sheet for a video game project. It contains two parts, theoretical and practical. In the theoretical part, this bachelor's thesis deals with the techniques and working procedures they use in the video game industry - specifically as a draftsman and character designer. It examines the work tasks that the Concept Artist is in charge of, and the output is, among other things, the Model Sheet. This means that it addresses body shape, stylization, gestures, expressions, clothing, props, colours, psychology, and other game specifics. In the part of the practical author, she outlines the vision of the author's game project and presents three complete cartoon designs of game characters, including their fictional biography and complete 2D visualization.

Keywords: Concept Art, Model Sheet, Character Design, Illustration, 2D Graphics, Illustration for Games, Creation, Video Games, Illustrations, Colours, Story.

List of technical terms and abbreviations

Concept Art – an inventive rendering of part or elements during a film, TV show, or game, created as a part of the event and visualisation of characters, costumes, environments, etc.

Model Sheet – In visual arts, a model sheet, also referred to as a personality board, character sheet, character study or just a study, could be a document accustomed to help standardise the looks, poses, and gestures of a personality in arts like animation, comics, and video games.

CGI - stands for computer-generated imagery. These are either 2D or 3D animations, objects, or renderings; the kind of art or media is a movie, television show, video game, or simulation.

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Introduction

I've always loved creating, painting and drawing, and in high school, I first came across computer graphics and digital art. I was so interested that I wanted to continue my education in this field. Given my years of art and graphic design, one day in high school, I said to myself that I didn't really want to do anything else in my life even if it frightened me how the game industry is ruthless to a female artist, I still want to push through and enjoy what I love.

I was interested in the topic of visual design in the development of computer games before but my interest peaked in the first year of University. The way developers around the world are creating real looking worlds, full of stories and interesting characters is fascinating. But no great game is complete without good visuals. Whether it's an old-fashioned RPG or the latest FPS - there's always an extremely talented art department behind it all. My biggest wish is to become part of the concept art team and help create games that will win over their admirers. When I discussed my idea, I was surprised that I was able to work on this.

The ambition of the work, I believe that completing such a project could significantly improve my portfolio and also give me the necessary and valuable experience in creating a concept for video games. In my bachelor's thesis, I tried to express as accurately as possible my vision of a computer video game that I personally or my friends would like to play. We live in an age where anything is possible - which is unbelievable. But where there are infinite possibilities, there are also infinite opportunities for error.

The theoretical part will present the Concept art industry and Concept artist work. This would teach students how they can apply in the industry or create characters from scratch. This should cover a basic understanding of how the process of creating a character and delivering it to the client.

1 Fundamentals

We should overall work on our skills and learn each day possible, even professionals are learning something new every day as the time and technology is moving forward. Most of the fundamentals of the art will be explained in the processes of character. Building a reference library, understanding human and animal anatomy, having a sharp eye for structure, shape, light, shade colour and details, knowing where to find your references and others. The only things I would like to mention here are the tools that we would work on on a daily basis and are needed to have as the rest of this will be talked about in other topics of the thesis.

1.1 2D and 3D art tools

There is various equipment that is available for artists and hobbyists to grow their skills or use for their art. We separate tools into digital and traditional like pencils, pens, watercolour, markers, brushes and paints. Which can get very expensive. But with today's technology, we also have digital tools. To create either 2D or 3D. Each one of these tools can be best for the given job if used correctly. No matter if it's a free or paid software program.

Between 2D and 3D we pick depending on what we actually need to do. 2D programs like Krita or Photoshop that need to be purchased are good for editing photos or a painting program. For 3D programs like 3ds Max and Maya exist. They are specifically made for this kind of job and it's required to have some kind of knowledge of these programs. Programs that are fairly similar are more affordable and can have fewer assets that could be needed.

It can be scary to try to figure out what kind of tools to use, without wasting time learning a new program or tool. It's always useful to try different mediums to know our boundaries. Pencils, pens and paints can be created digitally as brushes with textures. This can be a big plus if you don't want to spend money or you don't have a scanner, but need to invest in a good computer, software and graphic tablet. (Crossley, 2014)

I used a program called Clip Studio Paint which is a newly developed painting program that can be used for illustration, comics and animation. This program is a bit cheaper than photoshop but there are alternatives that are free and can bring the same quality work if used correctly and efficiently.

2 Understanding the industry

Understanding industry is important if it's the workspace we want to work in. In this short introduction I will speak about the beginning of video games. It may look like it is not needed but it's an interesting starting point to the understating the industry and why it is different now.

Today's video games have different genres not only the very realistic 3D, but also games with 2D environment. It all has begun in the 1940s. Games were very simple and primitive like board games, card or chess games. But the first actual video game was called Tic-Tac-Toe. Spacewar! was the first very basic shooter game. Around 1970s, the commercial application of these attractions was released in the form of arcade games: mass-produced self-contained units which dispense coin-operated entertainment and the most iconic game called Pong. Pong was phenomenally popular and become the first successful game. From this point, a new wave of games has increased. The 1980's were a colourful decade, and newly available arcade technology reflected this with titles like Pac Man. Where we had first small signs of character design. In the early 1990's the games like Donkey Kong or Super Mario Bros were born and gave birth to art heavy game levels, characters and graphics. Till to this day the interest in games grow by each day as there are different kinds of games. (Kennedy 2013, pg.18)

2.1 The Concept Art in the gaming industry

Concept art can be a visual representation that tells a story or conveys a distinct look towards the audience. It is additionally also concisely described as a visible preview of a personality, place, or object which can be used in future games. The film, animation, and, more recently, game development are all samples of this. Concept art includes a large selection of possibilities that artists can apply to. It doesn't end with just character design.

For example, when a game production company brings an idea with personality, they need to visualise them in numerous ways to hunt out the most effective believable visuals and create more polished and detailed designs to lure the audience. It's just a story that becomes art, and a primary observation could also become more. Concept art provides a powerful indicator that helps align the creatives performing on the project.

Elliot Lily made a chart based on the average production time of three years:

The “blue-key” phase is at the beginning of most projects. The term refers to “the sky’s the limit” or “anything goes”. During this phase, the studio will give the artist creative freedom to explore specific game-related ideas without too many restrictions put on them. Alternatively, artists may even be allowed to pitch their own ideas to the team as long it pertains to the game somehow.

1st Year, Preproduction: A concept artist is extremely engaged during the preproduction phase. Words and ideas are realised into visuals, discussed and reiterated upon, then end up as approved art direction. This phase usually lasts six months to a year, but if the project suffers from a change in upper management or a “reboot”, the timeline can grow longer.

2nd Year, Production year: During production, efforts shift from fabricating designs to assisting the team where is necessary. This can range from supplying “paint overs” of level “block outs” (a rapid way to prototype and test out a game level before entering development) and addressing lighting issues to designing props and set pieces.

3rd Year, The Post-production: As concept needs for the projects begin to wind down, most artists begin to roll off onto the next upcoming project. Those who remain will likely help with such tasks as marketing needs, screenshot cleanup, UI/HUD elements and achievement icons, among others. (E. Lilly 2015, pg. 17)

Conversely, concept designs can usually be created very quickly, even sketched in minutes in some cases. When a final design fails, this usually renders the work done on both the concept drafts and, therefore the design itself obsolete. In contrast, a failed concept piece won't be as big a loss and is just another addition to a discarded game concept room.

Finally, there's an element of presentation and retrospective. At this stage of the look process, game makers can have a look at the piece and make adjustments. Like eye colour, weapon, and clothes changes. If they just like the idea but not the visualisation, they will just commission more art. It also happens that the art piece doesn't fully match the concept, but the developers might just like the art piece most that they modify the thought to match the planning.

Before entering the industry, we should form a plan of what is the end goal. Focusing just on one path where we are exclusive to one thing and wish to master or be good from each job, possibly getting more job offers but on the downside with the flexibility over time, we will have to learn how to give up and switch to a different job. Producers and directors need to know how much use you can be and how well you are able to bring ideas and sell your work.

Another thing is also the style you will bring. Need to find a studio that is willing to bring you in or how much you need to break out of your comfort zone to make the style very similar to the studio. You cant draw in cute cartoony style, when you work for studio that creates scary creatures. Your value is based on your art production not that much on your artwork itself.

There are multiple different types of game studios, independent studios that are not owned by anyone and most are supported by Kickstarter by the audience they already build or people who would be very interested in the game that they are making. Then we got larger studios that are either owned by companies or publishers that would give a title for one or more platforms where the game would be published. (Lilly, 2017)

There are multiple jobs that create the pipeline of creation of the game. In smaller studios, one person can have multiple roles but in bigger companies, it is easier to relax with one role. The main role of the producer, who is the head of the game development and runs the process of the game. Paying attention to the deadline and making sure the budget doesn't go over the line. These people are usually not artists. Head game designer: Game Designers are originally the ones who come up with the game idea. They are the ones who bring the idea of characters and settings and have hundreds of long pages of documents that are presented. Art Director: are the top artist in the team and are expected to keep in check the vision, budget and schedule. They coordinate in which style the game is made and everything is visually working together. Chief engineers and software engineers oversee the programming, and coding core of the game to have no issues. Concept, environment and character artists are the ones who build up the environment and present their work to the art director. Special effects animators create the effects of explosions, muzzle flashes and so on. User interface artists create vital icons and things that can navigate the players through the game.

Marketing Artist creates the public image, from directing prints and animations to commercials. Level designers design levels in the game for players. (Kennedy, 2013)

2.2 Why is concept art important in games?

It's a bridge between storytelling and the audience; therefore, you need to make the story or game more appealing. Not all consumers have a visual library or imagination like an artist. Concept art gives the flexibility to clear the thought of a visible story. If you're telling someone about your idea, they will have a tough time visualising it. Two people can imagine various things whether or not they need an identical description. Concept art keeps stale visuals, keeping the project and consumers on the identical side so everyone can communicate easily with one another.

Concept design in any industry is taken as a stepping stone after the idea and story. In-game industry concept creating an initial or final design could be a very time-consuming process. The concept needs to be also approved by the mechanical part of the game. If the concept isn't approved, the artists must return to phase one. Concept artists are extremely engaged in the early phases; it's to determine how the budget and time of other employees will fancy delivering the project to a new level.

2.3 Concept Artist

Before I explain a bit more about the job of the concept artist. Not many people would know or even imagine that the game industry or concept artist would be a job. The demand in this field of labour was especially incredibly high. At least like that, it was a couple of years back because we have experienced senior or lead artists, who had to adjust to the drastic changes over the years of the game industry evolving to what it is now. Now the demand moved from just being good at anatomy, critical thinking or creativity to being able to work with other programs than digital programs such as Photoshop, to be flexible and understanding. This topic could unfold more to this matter, but we are focusing on the more artistic side of concept art.

One of the necessities of the concept artist is visual problem-solving and understanding of the limitations of the game character they've been set to. Artists need to own constraints and some time, they will have to learn to let go when the deadline hits. Thematic

contrast because the lore, the settings or the one amongst the sport limits the brainstorming of the first phases.

There are many roles that idea artists can take. But the most jobs they will take would be Character, Environment and Equipment Concept Art. With this, it doesn't end just here. These are so far the main ones and the ones that most artists or people know, but of course, there is more. In bigger companies, people can get smaller jobs to take care of.

Through given storytelling, a concept artist visualises characters, environments, props, and more. Drawing information from drawings, stories from existing cultures and imagining sequences that get converted into a game for the audience, or developing new worlds, characters and creatures from scratch, of course, not literally, are general tasks for this artist. Given the number of things that go into making a movie or game, it's no surprise that this field is expanding every year as CGI and programming are developing.

Being hired is not just that easy. It's one thinking about how to paint a beautiful landscape or breath-taking character design. It's something entirely different to design a modular system that modellers can build multiple iterations of different types of structures out of utilising concept art that you have designed just the parts for but communicate it effectively enough that they can extrapolate on that design to build a lot more structures just like it.

Preparing a portfolio in exactly why of your style and what you plan to pursue. Some studios can be interested in your portfolio but not always there would be a response. Explains how concept artists interact with the team and managers. Because when you graduate without any experience, you would originally be looking for a job that would be Junior concept artist. If there is a lead or senior concept artist it's expected they have years of experience in the game industry and be trusted with harder work and leadership for the junior artists. Now we may speak about the veterans of the art industry. An art director is the bridge between other departments but mostly the concept team and art team. Now before I continue, I may confuse you a bit by saying, concept team and art team. As said earlier, concept artist is not a job to make beautiful paintings, it's more of the mechanical part of creating designs that work, and the art team is focusing more on the salesperson role and making the design overall more attractive for the audience. The art director's job keeps checking on all teams and their deadlines, managing tasks and schedules and overall giving criticism. Concept artists should

expect game limitations, deadlines, pressures of maximum concepts but with a limit of looking after themselves to not burn out and still have a personal time for their own growth. (Lilly, 2015)

Character Concept Art: Characters are paramount to the story. According to the character story, these character designs should be attractive, aesthetically exciting, and memorable. Most work involves researching several photos to create a mood or reference board. They are bringing up questions about character, such as culture, history, and people, to make it more fitting. Before the finished piece, numerous character design drafts are brought to the director before agreeing on the finished design.

Environment Concept Art: Sketching and interpreting the game's backgrounds, scenery and architecture to develop world, character and game fitting.

It's your job as environment artist to create the game's backgrounds and scenery to make the realistic world in which the game characters operate. It's also a critical component in enticing players into the game experience, guiding them toward the game's features and propelling them to the game's next level. (Kennedy 2013, pg. 89)

Research is the same process as for character design and equipment props. The environment's colour palette can also set away from the word that can be looked at. For example, Resident Evil Game has a cold colour palette while Borderlands Game welcomes you with warm and vibrant colours. Even if character designers have a script to go by with creating characters, they can use it for inspiration from the environment department.

Equipment Concept Art: Equipment is all about gear, weapons, armour and props. Equipment brings little more into the game than character or environment does. Most popular games heavily rely on weapons. It's not just the concepts of the weapons but also adds effects that weapons could make if it was sci-fi or fantasy genre. It needs to be easily recognizable for us what role the equipment or props has.

2.4 Character designer

The best description for a character designer can effectively communicate and draw a concept to be used for a significantly more critical purpose. Most of it's some style of storytelling, which may be an animation, movie, game or mascot. Character design may be a mixture of numerous things, but we'll specialise in drawing, design and story.

From given descriptions and notes from the Art director, character designers create an imaginative look of a personality. These notes usually include the character's personality or storytelling, which should bring the visual storytelling out. Characterisation would come with physical traits, colour palette and ethnicity. These elements can influence the creation and process of the character. This inspiration comes from a script but can also be from the concept art of other characters. The inspiration can come through other characters that were already created and influence the next generation or extras. The character's personality glows through facial expressions and physical poses.

Character designers research the anatomy of characters and relevant fashion styles to personalise their work. This brings the critical trait that artists should heavily rely on the ability of imagination and their visual library. Concepts are drawn on paper or digitally, counting on the studio where the artist would add. Character designers need to create a range of styles, usually including multiple designs of various character designs, clothes and colour palettes for one character, unless the colour palette has been decided on ahead. They present these sketches and designs to the art director or senior artist and address any feedback to improve or give constructive criticism.

Once the art director has approved a design, character designers create 'model sheets' which show the character from different angles. The model sheet will contain turnaround, multiple facial expressions and a colour palette. In 3D animation, these will be utilized by the modellers to form the characters. Not only would modders have a look at these model sheets, but illustration and storyboard artists will also take a look at these designs to include them in their work. Character designers don't seem to be often employed as freelancing, but some studios overseas request freelancing artists thanks to cheaper payment.

The character artist's primary responsibility is to make the 3D models for the characters and creatures within the game. Secondary duties can include participation in the character's design, texturing, painting, and modelling and texturing props and environment assets. you wish to possess an excellent understanding of anatomy and a decent sense of design to be a personality artist. Additionally, you have to master software programs like Maya, 3ds Max, ZBrush, and Photoshop.

2.5 Character Design

What is design? I would say it is "the organization of shapes." If I were to sum up character design specifically, I would say it is "generating a personality with feeling through the organization of shapes." (Silver 2017, pg. 12)

If we asked everyone what character design is, the answers would be different, but some of them would be very similar. The key fragments that artists can agree on are that characters should have a purpose, clarity, shape, language, silhouettes, exaggerations, contrast and colour. The purpose we either find within the story or abilities the character will be using. Without the purpose of the story, what can we call a character like that? From my judgement, it would be just an illustration. Clarity, shape, language and silhouette we create later on to make it memorable for the audience.

Nature is character design also. In nature, we can find an organically variety of contrasts and clear space. Inspiration from nature like shapes or colours is the best way to be sure you will not go wrong with the design. Using objects around, like lamps or teacups can be used as character design. Exploring is always a key to building up your visual library. Changing mediums as different styles and tools can bring up something unique. With creating the final character, we should never throw away first sketch ideas; they can always be used later on or developed for different characters. (Silver, 2017)

Characters are paramount to the story, and they are what attracts most of the audience. These character designs should be interesting, aesthetically exciting, and memorable, according to the character story. One of the core principles is Archetype. Archetypes represent the personality, behaviours and characteristics that we as humans identify and connect with. Studying and observing people around us is one of the good ways to see how to portray gestures or expressions.

The story can be a key thing, if you would like to own more depth within the design you may be creating. The character is always in service to the story. This enables them to use every version of the alternative design to establish a different distinct personality. The details of a character's personality often inform character designers about the visual attribute. Things that may help character designers effectively in character are making colour psychology, shape language, and even general psychology itself. The process of character design is up to the artist and director.

Designing character for yourself without any lead of a director or senior, you should not forget to be giving yourself questions surrounding your character. Mentioning all the questions that you would be already given answers to by someone else, but this time you are the director of your character and story. Researching real actors' images or watching videos could bring the character personality to be more appealing. (Character Design Quarterly 12, Rheenen, pg. 55)

Character design is a very comprehensive term and covers multiple avenues of character creation. First thing that comes to people's mind would be the visual aspect of the character, if the character is visually appealing for them and second if the character roles make sense to them with the visuals combined. Character artist needs to think first about the role of the character while on top of that, the environment and story in which the character lives. Making visually appealing characters is, of course, pleasing and interesting, but taking the risk of overlooking the other part can damage the character and storytelling. We may think that the audience will not notice such detail but that is not the case. There is at least a good 50% of people who are more interested in the character's lore than the visual. A character might be aesthetically pleasing to look at, but it is a physical trait. So in order for the audience to feel a connection with the character, there must be something they can relate to on a personal and emotional level.

In order to understand what character design is, you first need to understand character and design. (Silver 2017, pg. 12)

3 Process of Character design

3.1 Story

Having as much information about your character is the best guidance for a relatable character. Character's motives, flaws and behavioural models can be found in their past or backstory. The backstory is a collection of events preceding the story's plot, affecting the characters as the story unfolds. The past experiences sculpt human behaviour in the future, in both a good and bad sense. Age of character, time they live or their current financial position influences what they wear or their body. Thinking of body shape, gestures, expressions or what our character could wear should be most relatable. (Silver, 2017)

I will bring some examples, if we had a character who has low self-esteem, in their story they had a traumatic experience and were quite unlucky and they would be very depressed to this point. We would not let this character wear bright clothes and look cheerful unless in the story it's mentioned. Another backstory is a knight from the 13th Century. We would not do a concept of them wearing street clothes, unless it is on purpose of him being transported to another world or 13th century knight in futuristic style. Otherwise, to make the character likeable it's not important about the visuals but more of the story that pushes the visuals to another level.

Another example is from an actual game called The Last of Us by Naughty Dog which was released in 2013. The character name is Joel from the game. He is a man who was challenged years before by his daughter's death. This leads him to become an absent and ill-tempered man with nothing to lose, working dangerous jobs in the post-apocalyptic, disease-ravaged world. Hardly taking care of himself, he sleeps on the couch, forcing himself to take multiple jobs without break shows on his design. He is tasked with the safe transport of an immune girl roughly his late daughter's age named Ellie, to rebels to find a cure for the disease. At first, Joel's motive is to protect Ellie as the means to save the world. But as the pair spends time together, Joel ultimately dares to open up and becomes a caring father figure to Ellie. Ultimately when faced with a threat of losing Ellie like his daughter, Joel is ready to sacrifice the whole of humanity just to spare Ellie. Joel's behaviour and actions are all rooted in his past life's turning point. In order to prevent this trauma from repeating, his actions might not always be the right ones, but they are human. This is what makes him so relatable to many consumers.

3.2 In-depth with character design

3.2.1 Research of reference

Reference or mood board can help us search for what we want from our character and develop a more relatable character for our audience to connect with.

Vanessa Moraless explains how in her breakdown of mood boards, she was able to see the character from different aspects to make them more believable. The character she was creating was from the Victorian high society period. Her research contained everything from photographs to historical research to be culturally resonant and sensitive. Brings up questions about how to build up a character and restrict and not to drift away from an original idea. (Character Design Quarterly 13, pg. 48).

Picture references bring information that fills the needed area within your visual library so we should have a solid idea or goal of what we are searching for exactly. Use one or two elements out of one image and mix it carefully with another. This can ensure that what we draw is not made up but exists and blends a real-world element into our concept. We have to use the information we are taking from them wisely to improve our coordination and creativity. Last, but most important is. We should not rely on references the whole time, it can cloud our creativity. Using references that are blurry or too dark can make things very difficult. The best is to have your own or images that are free to use either copyright issues can come up. (Lilly 2015 pg. 61-69)

3.2.2 Shape Language

Now, simply put, shape language is using a shape to communicate meaning within a character. Even if the term is not being used that much or is not that known to most people, we subconsciously use it every day in our art. In art and animation to communicate this feeling how we feel with this shape and what it provokes within us. When creating the character, we are trying to communicate the character's purpose to the audience. we need to be very deliberate in the decisions to be made as artists. Being able to communicate a particular idea can be tricky and requires more effort than most people may expect. Shapes provoke an emotional response in the viewer without using any words. They can help to tell stories, so they are very valuable assets. There are a variety of shape types that are used in the character design; they're all around us in nature and home and come in different sizes and combinations.

Shapes can bring certain moods, emotions or expectations. Essentially, shapes can convey certain feelings to the viewer as in positive, negative or neutral feelings like colours, texture and value.

There are three primary shapes; Circle that is positivity and femininity. Square that has physicality and masculinity and lastly triangle creating certain movement and sharpness.

First we will talk about circles. Circle evokes positive thoughts of peace, kindness, innocence, softness and wholeness. These things are generally associated with femininity. Usually, circles are associated with the good guy or protagonist of the story trait. In a negative way which is perhaps a coward or they are spineless. They don't have a moral code or they yet haven't figured out what they believe in or are weak to stand up for themselves. For example, using a circle shape in male character kind, soft, happy or weak.

Square represents more of masculine physicality. The strength of the character doesn't need to be a physical strength but also an emotional or mental strength. It represents things like stability, dependability, discipline, strength and reliability. It is the more masculine of the primary shapes. It also represents negative things like boredom, stationariness or even stupidity. This character can be very much stuck in the past. They are not willing to change or adapt or step out of their box or comfort zone.

Triangle is neither masculine nor feminine. It represents movements, deviation and sharpness. The more extreme the angle, the greater the effect. For example, villains/antagonists are commonly designed with severe angles because those make the character feel far separated from masculine and feminine or heroic traits. The deviations from an ideal or a comfortable personality. In contrast to blocky or circular shapes, triangle shapes can make characters feel severe, unstable and dangerous.

One of the easiest ways to figure out if your characters work together is the use of shapes. If the shape is recognizable and readable, then so is your character. You can show interactions through very basic outlines. Imagine shapes to have a volume with weight and direction all of this on top brings energy and direction. (Character Design Quarterly 12, Rheenen)

3.2.3 Silhouettes

Silhouettes are usually dark outlined shapes on a lighter background. It has no details to bring the focus to the overall shape. A silhouette can represent an object or building to a human or creature. Silhouettes are strictly in 2D with the idea of understanding a certain thing. As long as the viewer can recognize the item it's a win situation. Usually, the art team picks the clearest and most dynamic silhouettes to move from. Using a brush pen, lasso tool in a program (like Photoshop, Clip Studio Paint) or shapes we can assemble silhouettes. Silhouette then can be multiplied to make the work faster and easier than creating the same silhouette but with changes. If there is more than one silhouette it is good to do line-ups. The same goes for multiple characters to line them up next to each other to see if they don't clash but are in harmony with each other. After reviewing the silhouette thumbnails with the art director, the selected few will be pushed a bit further with the design. This is one of the reasons to make things easier. If we started to make multiple designs with details we would lose time and money for the company. Methods like this resolve the time that would be wasted. With a couple of the designs of different silhouettes, one gets picked and that one is being pushed with a bit more details and tweaking. Adding details requires the research that was mentioned earlier to not bring unnecessary issues of incorrect cultural approach. We are trying to create a believable character that viewers can relate to. This phase can be called sketching or rough painting depending how we approach it. We work in values only to not bring any unnecessary colouring that would come afterwards unless the colour pallet was already decided on. Once satisfied, once again approach the senior or art director with the current concepts. (Kennedy 2013, pg. 63-69)

3.2.4 Gesture

Gestures can be approached in different ways. A common way is to draw a stick figure but it's said that the essential of gesture is line of action, weight and balance. Weight and balance are controlled with an angle of the shoulder and hips with the addition of masses, bringing out the character out. There are several ways of approaching this subject to make it energetic and bring character to life. We are trying to communicate the gravity pressure on our character. Making character unbalanced bring the dynamic and interest of the viewer. Another way can be through energy scribbles and letting the hand go free. It looks very similar to the stick figures, but this method lets the mind go way looser.

Using rigid forms to build a pose can lose a little bit of life and gesture, but it helps place our character in three-dimensional space. In contrast with the original way of gesture which is a looser drawing style, it helps to understand the natural rhythm and curvatures of the body. The gesture of the movement describes the character's personality the best. Using the characters' looks to enhance their personality and what they are feeling will lower the need for long dialogues about it. Mediate the story of the characters through colour, shape and pose. Poses are the way the character is presented. The character's mood will be easily read from its posture. As in a theatre, dance and other performing arts, the pose involves every body part. Conveying a message or emotion relies heavily on poses and silhouettes.

Pose that is horizontal brings rest and calm manner to us, when vertical strength and solidity, diagonal, determines more of the motion and action of the character. Body language reveals most about the person, we can lie, but our bodies don't. How would someone express anger, happiness or being sad? Body language is the visual form of communication. Even a stick figure should be able to show a gesture if we cannot do that, there will be no expression in the gesture. Exaggerating the emotion through the pose to have the character more dramatic. The ladder is symmetrical, stiff and boring. The gesture is in angles, bending and stretching. We are trying to generate more appeal and interest to the viewer. Mostly using the technique of zigzag helps the contrast of angles. Balancing the big detail with multiple small ones on the other side. If there was just one small detail on the other side, the character would feel unbalanced. Balancing the pose gives the feeling of the character not falling over. This is more about the shapes of the character, but it is in contrast with the gesture. Now with the perspective of the gesture or pose, we bring up once again the volume that needs to be worked on with it also to make sense overall. Silver talks about shapes such as oval if the character is sitting or is about the getup. The 3D box brings dimensionality, the spacing and depth with the volume, with this drawing doesn't feel stiff or flat due to it being 2D. There are other ways how to go about the pose gesture like, triangle, hexagram + vertical line, rectangle + vertical line or box even. Observing the reference pose we should look at the negative space that helps to clear the form and understand also. (Silver, 2017)

3.2.5 Colour Psychology

When colour psychology is used in video games it helps the player establish spatial relationships to identify the objects and interact with the environment and experience the full mood and atmosphere of the scenes that they are playing in different colour and lighting

aspects are carefully manipulated to invoke the desired responses in players. Colour grading is given a special amount of care to ensure the feelings that induce complement the story. The way in which people respond to colour is dependent on many factors such as cultural background, age and personal experience.

For example, in eastern cultures red is associated with happiness and prosperity while western culture sees it as a symbol of passion or danger. As a worldwide phenomenon, games need to take all of these slight differences into account which adds an extra layer of difficulty to what was already the complex task of playing a believable engaging picture. So, unless we present it in tones of grey. There are three factors in determining colour. Hue: which is colour itself. Saturation is the intensity of the colour itself and the brightness of how light or dark the colour is. With just hue, saturation and brightness, HSB for short. We can create a complex colour scheme, rather simply. Colour scripts can be so easily changed like the monochromatic blue moonlight with purple accents with yellow with green accents to fully change the scenery. (Gurney, 2010)

It is important to remember the meanings that are associated with colours. Colour interpretations can differ from individual to individual and across cultures. However, there are common colour connections associated with certain colour symbolism. For example, countries closer to the equator will have colourful clothing and artwork, countries closer to the pole will have more muted clothing. Colours on the spectrum of red, orange and yellow are seen universally as joy, happiness, warmth, passion, energy and aggressiveness. On the other side of the colour wheel, blue, green and turquoise are viewed as cool, calming and melancholic colours. A colour scheme alone can have a dramatic effect on the look and feel of a character. an aesthetically pleasing whole for the viewer to look at. Small details of strong colours are good visual focal points and can give hints about the character as a person. (Character Design Quarterly 12)

Visual appeal is one of the things that artists will try to match colours of a different hue, value and saturation to colour schemes that are pleasant to look at. In environment or character design. As in character design, it is there to suggest the personality traits to build a more convincing and relatable main character where words would normally fail.

Understanding value and saturation are helpful because you can use them to assign the importance of something visually. Value is the range of lightness and darkness within a subject regardless of colour and saturation. What can bring more attention to the character if not value. Colour alone can be lost in the design if we know how to correctly use the power of value. Character value should generally shift from the darkest at the feet/lower body to the lightest at the upper body and head. This brings an important area of the character to be pointed out to the player's eye. For example, with value, if you have a lot of dark and grey in the image and suddenly something white or light in it. Eyes are immediately drawn to the white space. Value gives a chance to create contrast in your image too. A big part of making good art is creating this hierarchy of importance in your image. It's a way to tell a story where you want the eye to be drawn. Saturation has an impact on the viewer. It's being used a lot in movies but also in video games. (Gurney, 2010)

As an overall colour scheme in-game for example, the Borderlands or Fortnite games are very saturated games, but Call of Duty or Resident Evil has its saturation very low to bring the seriousness and reality towards the viewer.

For character design the best example would be Mario from Super Mario Games. Mario wears blue overalls that perfectly match the complimentary red of his shirt and that this combination of colours was not a coincidence. Red and blue induce a sense of adventure and energize the player while also telling the story of Mario's motives. The red suggests he is on a quest of passion to retrieve his loved one who has been kidnapped and is now in danger. While the blue lets us know he is calm and confident in his ability to save her. On the other hand, Princess Peach has blond hair and blue eyes signifying innocence while her pink dress subliminally suggests she is the love interest of the main character Mario. The Project CD Red game is called Witcher. The main protagonist Geralt of Rivia has white hair and piercing yellow eyes and they reveal his magical combat powers, wise mind and heightened senses on the other hand The Bioshock's side character Elizabeth has a white and blue outfit, along with her blue eyes signifying her calm nature and kind glorious alignment.

The question is now, is it better to start with grayscale or in colour? It depends mostly on the preference of the artist if it's about the painting. But for character design it is better to start with grayscale, which was mentioned in the silhouettes.

If it's about the illustration there are always ways to make adjustments to the art piece. If we started in colour, our entire painting should be or preferably be a colour palette we set for ourselves in head of time. But preferably, it's better to learn how to paint or draw in grayscale as it saves time. Taking as much time as we want, to play with lighting the scene how we want. Another reason to start with grayscale is it is easier to deal with colour vision abnormalities. In this stage, we can see the contrast within a character and change them. (Gurney, 2010)

The usage of colour by a character designer is referred to as a palette for better terms. Selectivity is crucial when it comes to colour. The last thing that we want is a character with multiple hues with no hierarchy or purpose. This colour scheme will just give a negative feeling. Viewers, instead of being engaged with the character, will rather feel disturbed. It is crucial to make one colour the primary colour of a character and utilise additional colours to support that colour as much as possible.

The character palette is similar to the silhouette. Well, the designed pallet is totally recognizable from the rectangular swatches alone. A combination of a good silhouette and palate equals a recognizable character.

3.2.6 Expression

Expression is all about conveying emotional personality, and storytelling. This is typically done through the use of facial expressions and body language and others assisted by visual cues like colour. When trying to improve your own use of expression it's important to keep in mind how different tones can affect the variety or extremity of expressions you can reach. Expression is only as valuable as how clearly it was conveyed. Quality of clarity in character design is more readily and easily you're able to convey something the more successful you will be able to convey it to the audience. There is a sort of hierarchy that we respond to in characters' expressions, that starts with the eyes and body language. A lot of clear emotions we could convey with just these two elements.

Eyes are one of the ways to bring a lot of emotion into a character. Usually, characters either have covered half of their faces or wearing a mask that only has eye holes. Through eyes, we can show their intention, mood or focus at that moment. This brings a bit of psychology in. If we feel uncomfortable or disgusted we tend to look away or squeeze our

eyes shut but if it was like interest or we don't want to give away our curiosity we look from the side view. On other hand while being surprised or scared our eyelids are wide open with the addition of our eyebrows furrowing or going up. Studying how eyes work with emotions can bring the character's emotion to another level. (Character Design Quarterly 16)

3.2.7 Exaggeration

Exaggeration is one of the main components of character design in terms of storytelling if your character is more of a cartoony style.

There are many ways you can exaggerate a character, you can push their facial expressions, their gesture or even physical form. Any of these things can improve a story moment by communicating an emotion or action with clarity. When designing a character you want viewers to know without a doubt. It is important to study realistic anatomy and proportions before you go too far into exaggerating our character, we need to know what goes where before we start stretching, pushing or pulling physical forms.

When we approaching exaggeration, what cannot be forgotten is the character's form and mannerisms to be tailored or match their unique personality experiences and skill sets more often than not we will want to make certain features more prominent than others based on a character's specialities, however fiving character contradictory features to their skill set can make for the unique character to identify with.

3.3 Model sheet

From my perspective, I think there are three things to be on the lookout for when making the character sheet should have; Who's looking at it? What field it's for and what it's focused on. As this document sheet is focused on either comics, animation, video games and other.

The model sheet's main purpose is to communicate information, especially in the context of a video game company that would be passed to a 3D artist. That would have to translate the 2D concept into a 3D model. It contains the characters' posing orthographic turnaround as in A or T pose, if facial detail is covered there should be face detail on side without a cover, colour pallet. (Lilly 2017, pg. 70-71)

In animation and comics it's influenced to have model construction turnarounds: front, front $\frac{3}{4}$, side, back and back $\frac{3}{4}$, and straight back view of character, but that would be especially for 2D animation rather than 3D. Silver mentioned in animation it's essential to have $\frac{3}{4}$ view of a character. This view template will be redrawn multiple times anyways for different clothes, as information for storyboard artists and $\frac{3}{4}$ view brings volume. If the character had a special design, like curved mechanical legs or big arms, visualising volume is important. Front view would be useless to translate this information unless it will be requested. Head turns are also essential if our character is especially exaggerated. Lastly adding horizontal landmarks to our sheet for ourselves only to keep on lookout for volume and consistency. (Silver, 2017)

The content of the character concept sheet there should be 3 things that need to be included. The main concept that should be polished, it's a focal point of our design sheet. The 3D artist will spend most of their time looking at it and analysing it. The rest of the polished concept will be a support material to make that translation smoother. To add to this, this polished concept doesn't need to be necessary for 3d artists but also for things like an art book, cartoon or anything. The important thing is, that somebody else will take this concept and do something with this later on. It has to be made sure that our polished concept is shaded and add to it light information on top of our shading to bring a volume of the character, to read it better. We will also want this to be in full colour. The last thing will be the angle of our

character. Perspective can be front facing if the character has a very simple design. But if it's a more complicated design the three-quarter view is better. The secondary view does not need to be polished to big extent if the main view of our character was rendered, but it is not bad to do so. This is usually the back of the character, that communicates the rest of the character. Lastly, additional sketches of different clothing variations, clothing pieces, equipment, weapon or even action poses and facial expressions if the character is used in cinematic cutscenes. For a 3D artist is good to add material previews, and what kind of material contains the design.

The presentation of our character is also important. The canvas should be picked to not be not too wide or too tall. Recommended for the widescreen format would be 16x9 and if it will be more of printing 8.5 x 11. Now make sure our values are enough to not hide any details. The character should not be too dark on the character sheet. Background colours should be done in a colour that doesn't make our character blend, fade or disappear into the background. Readability is important. If the character background is blending a little bit with the character adding a rim light is a way to avoid or add colour behind our character as a backlight. Lastly, we include in the design sheet the description. Descriptions should be kept to a basic minimum or very short background story, but we should rely on the art itself to do the communication with the viewer.

4 Practical Part

The game story will be situated in a fictional world but still with current countries. I have mentioned 3-character sheets. It will be the protagonist sheet, antagonist sheet and antagonists' soldiers.

4.1 Story

The story is happening in 21. century. US Federals gained a piece of information given by the mole before the connection was lost. The head of Athena corporation is planning to make the most dangerous biological product so far. As US federals cannot send their own people to not get tracked, they hire a private military company Fenrir to find out what happened to the mole and product. The second objective is to destroy or transport the biological weapon to the extraction place. It's unknown if it will be put up as a product for sale but it's best to know what it contains and what measurements are needed for protection.

This establishment is situated on an island where it's possible to only get to by air or water transport. This corporation deals with weaponry and its speciality: biological weapons. The company is owned by Athena Leroy. She is a former military scientist who claims her work was neglected by the army and decided to pursue her knowledge somewhere else. The last objective is to eliminate anyone in the path of obtaining it. The group of five people was handpicked by the owner of the military company himself. All trust was given that this task would be accomplished no matter what it took.

4.2 Biography of Our Characters

4.2.1 Protagonist

Our protagonist's name is Jacob Rhett. British, caucasian male, in his forties. He works as a doctor at Fenrir company. He has experience as a military combat medic. His code name is Doc and he was one of the first recruits. But normally outsiders would refer to him as Doc. Each contractor has their number and code name. For their safety, they use a balaclava and mask to cover their identity. When deployed for the missions they only call each other with a code name.

Our protagonist for this mission will be part of the Alpha Team. The rest of the team will contain of a sniper, the leader, a stealthy soldier and a hacker. All of them wear very similar uniforms to be unified and recognisable.

Our protagonist is second in charge if anything happened to the leader. Number 09 or Doc is one of the three best medics that the Fenrir has recruited. Being a doctor demands chemistry, biology, anatomy, and mathematics. Doc brings his special weapons into the field that can help and hurt depending what intentions he has.

4.2.2 Antagonist

Our antagonist is Athena Leroy. French caucasian female, in her forties. A former military scientist with some side knowledge as a sniper. Currently works as an arms dealer and owns her own corporation named after her. Athena Corporation deals with guns but is mostly specialized in biological weaponry. The corporation has existed now for about 10 years. Athena was mostly keeping her low profile while still selling with high profits. 10 years ago Athena was working on her private project, after many attempts of meddling with the elements and contraband, she created a bioweapon prototype. She thought of selling this prototype to the military but found a better way. As she found it very unpleasant working for people who don't appreciate her talent. A way she could make more money in a different kind of career she switched to after she resigned. Using her background as a well-known scientist she was able to sell the prototype. With this, she was able to build her own company. Calling the prototype success and selling the old ideas made Athena well known. The success Athena attracted supporters and donators to her company for upcoming project, 5 years later she bought an island where the company was built, because continuous expansion of the company Athena recruited elite soldiers. Now Athena never leaves without security service as her reputation grew again over the next couple of years.

Idea: Athena is a slim female, with short black hair, red lips. Wears a white lab coat with accents of red like the back of coat or red tie, belt, glasses and earrings. Clothes should be simple yet very elegant, looking smart and professional. But not to forget she is a scientist. A black bodysuit that protects her. Her attitude we could say is: Big Ego, Unpredictable, Remorseless (sadistic), Highly Intelligent

4.2.3 Extra Character

Athena Security Service. Hired trusting men and females to protect the products and employees of the Corporation. The age category is between 20 to 50 years old. Soldiers wear black military uniforms with vests, gas masks and helmets. Gas masks will be worn if dangerous chemicals escaped. Each one of them should look like a copy of the other unless we have other categories of soldiers. Clothing is in contrast with Antagonist.

4.3 Reference board

Reference board doesn't need to be just pictures, inspiration can be found in movies, documentaries and music that is fitting to describe a character. I was trying to hold on to the theme of 21 century but not to carry of to futuristic mood. I was using website called Pinterest for gathering the references and saving them in folder.

4.3.1 Protagonist

For the protagonist, I was searching for soldiers. PMC aka private military company can have the same uniform clothes but also, they have the option of casual clothing. To have a better understanding, search for everything about private military companies. One thing that caught my attention was a former private military called Blackwater.

Even though I was looking up private military soldiers I had to remember that I was creating a combat medic and not a soldier. I was searching for standard contents of a combat medics kit. I knew I wanted to have him a big backpack or something like a backpack above the lower part of his body. He should look stable, someone to rely on.

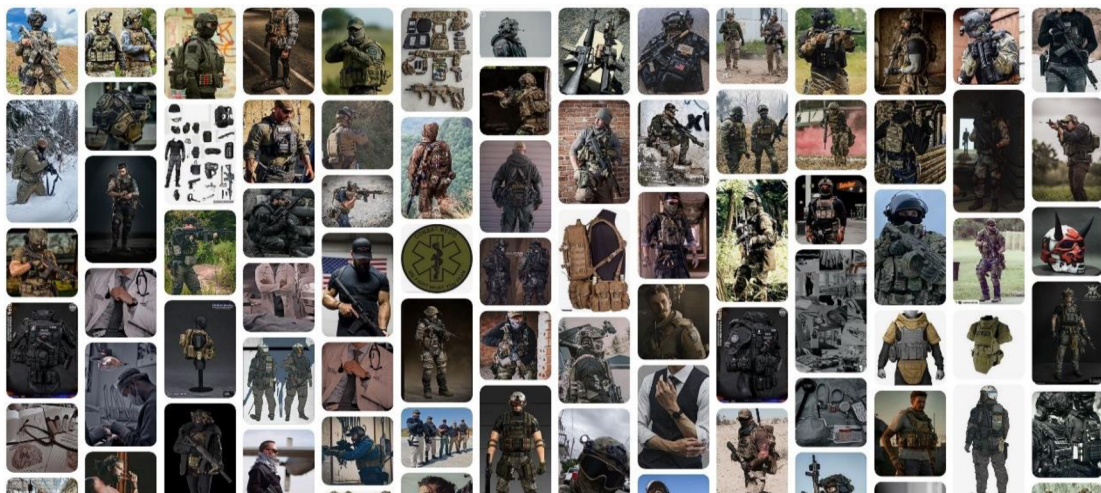


Figure 1: Protagonist reference board

4.3.2 Antagonist

For Athena, I was searching for white clothes from a range of dresses and suits. In the early stages of development, I wished for Athena to be a sniper but also a very elegant lady who likes simplicity. In the background while thinking I was listening to French music to have a better feeling for expressing and imagining this character. Usually, when creating a villain, it would be darker colours like black or green. But I decided to colour it white to hide who she is and that she doesn't get her hands dirty to be seen as pure and angelic. More of a character who pulls the strings.

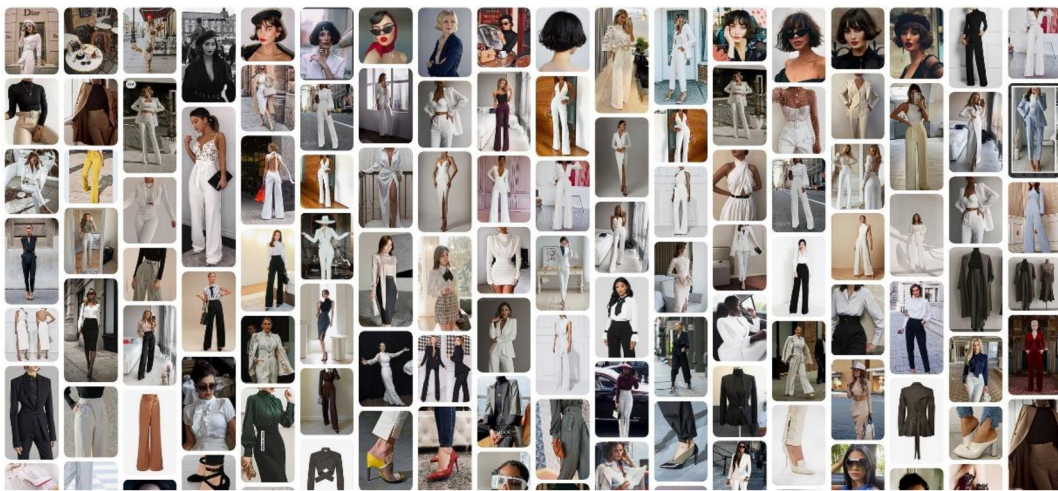


Figure 2: Antagonist reference board

4.3.3 Antagonist Soldiers

This reference board is similar to the protagonist but the difference is in the colour scheme. Mostly searching for uniforms in black, different styles of vests and gas masks.

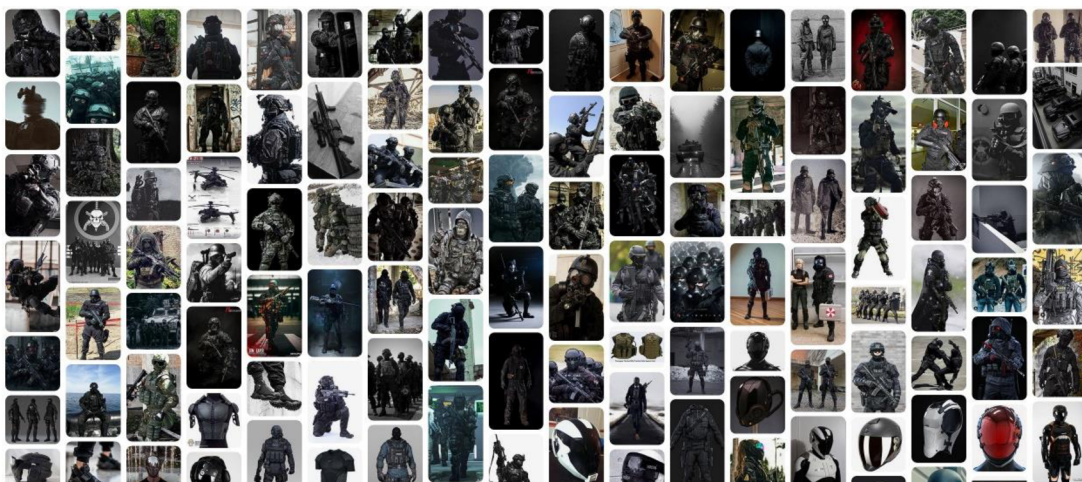


Figure 3: Antagonist soldier reference board

4.4 Shapes and Silhouettes

4.4.1 Protagonist

Exploring different silhouettes with multiple clothes changes with mindset of certain vision for the character.

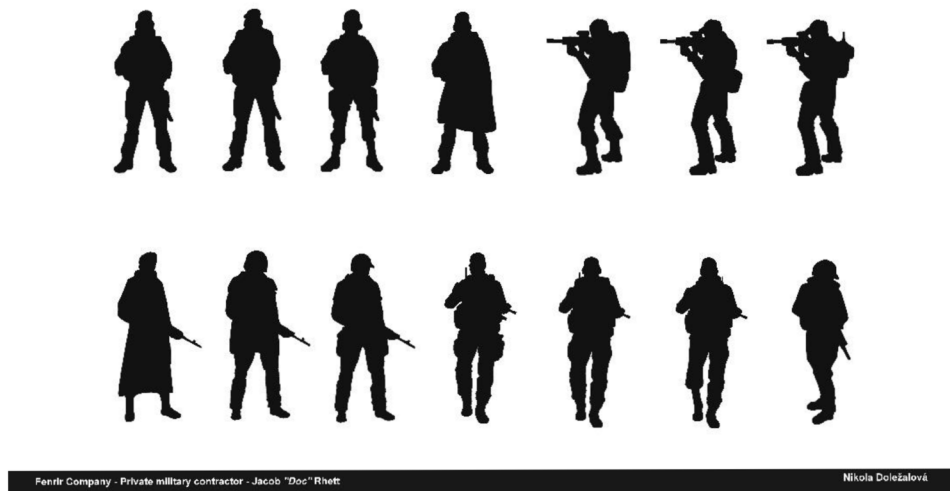


Figure 4: Protagonist Silhouettes

Where I also explored the dynamic between the protagonist and the group he will be part of for the mission.



Figure 5: Protagonist Team Silhouettes

4.4.2 Antagonist

When creating Athena the first idea was of a scientist with a sniper. At the end of the game, Athena would be the last boss of the protagonist's defeat. I wanted to make two designs for the sniper and the scientist look.



Athena Corporation - Bloweapons dealer - Olivia Leroy

Nikola Doležalová

Figure 6: Antagonist Silhouettes

4.5 Colour Palette

I wanted the main characters to contrast each other. Blue will be the main colour for Doc. Symbolizing stability, wisdom and health. Meanwhile, red that will be shared with antagonist soldiers expressing energy, willpower and leadership. But the antagonist also will have secondary primary colour which will be white and for soldier's black colours in contrast with her.

4.6 Rough visual sketch

Moving away from silhouettes I wanted to see more of the form and rough details of how I could build up the characters.

4.6.1 Protagonist

The first row of sketches has its own finalised sketch of the combat medic Doc. The blue visor decorating the wolf mask would be the main trait of our character. The first question that I had to ask myself is, do I want this character to be more casual or uniformed, as contractors have more freedom to a certain point. Having his edited story aside, it was best to have a similar uniform and mask that all of them shared, except the colours could be tweaked for each member.

Testing different colours, in the beginning, helped me to understand if I want a blue uniform or in a colour range of brown and green to be easily camouflaged. The story is situated on an island that could be full of trees and bushes. Holding onto this colour palette would be the most fitting. Next was the clothes design itself, depending on the region or the purpose,

the army vest can be customisable along with shoulder straps, padded shoulders, bags and pouches for the magazine. There are different styles of knee pads and helmets.



Figure 7: Protagonist uniform sketches

Masks:

Fenrir's trademark is a mask. I had to think of what kind of material masks would be made of or what its purpose would be. As the main goal is in the establishment it would make sense to give the main characters gasmask but then it would clash with the antagonist soldiers. Later on, while trying to think of the name for the military company that is now Fenrir. I decided to make the mask a mix of the human-wolf skulls. The mask would be made of a ballistic material, nostrils and below the cheek bones would be open for easy air access.

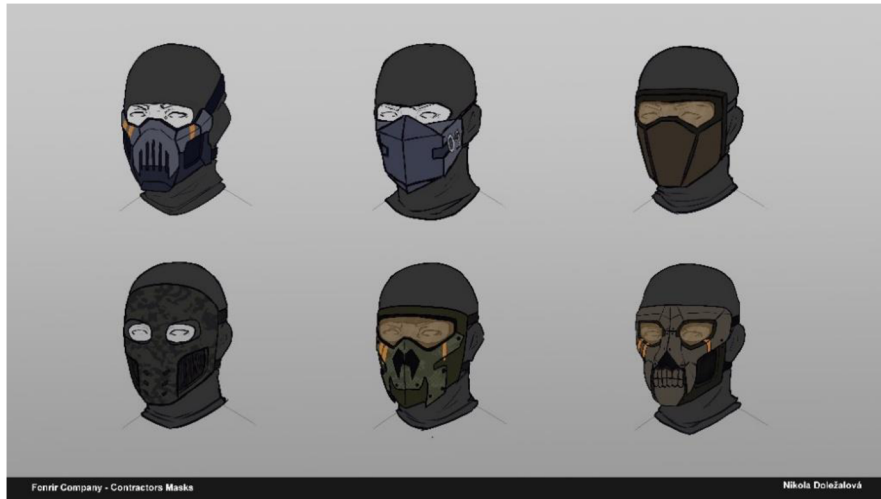


Figure 8: Fenrir mask concepts

Lastly, I created a logo for the Fenrir company. This was not a primary target for me but as a detail, it felt essential. To make the reasoning behind the mask and Doc's patch. Researching other companies' names, I noticed they usually have a small meaning behind them. When thinking about Athena the Greek mythology it was pointed out that I should have something similar to a private military company. At first, it was Hel or Helheim but I have decided for Fenrir to combine the wolf with the human skull

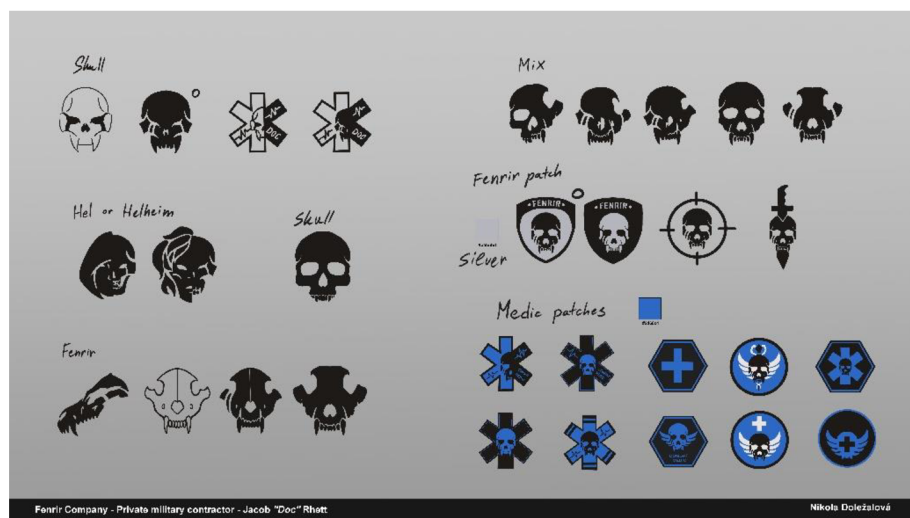


Figure 9: Fenrir Logo

4.6.2 Antagonist

The antagonist's early designs were about an elegant scientist with a bodysuit that covers her body as she has a side role of a sniper. In the early stages of the development, it took a very long time to get out of this phase of a sniper with a body suit that also uses her coat.

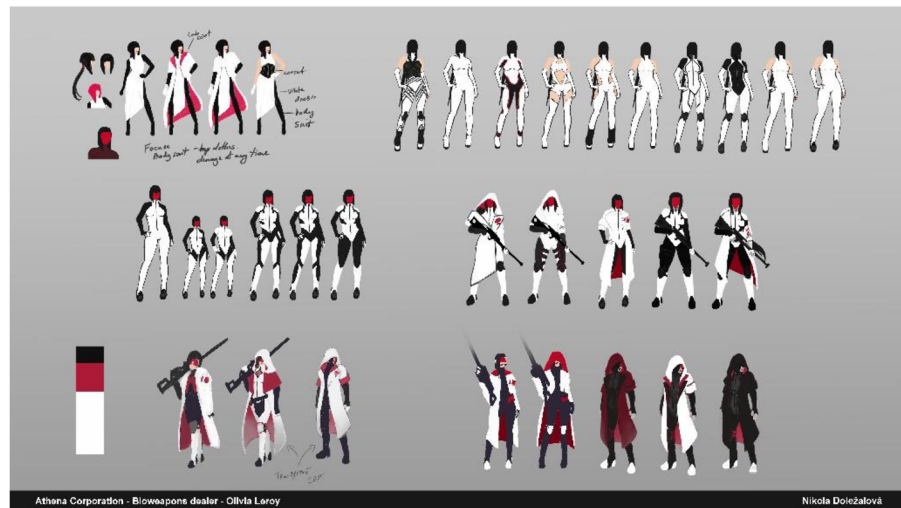


Figure 10: Athena's first concept ideas

I went over the designs of the suit in black and white colours, where her mask was fully covering her face giving her a futuristic look, the idea of using the coat for both occasions slowly didn't fit anymore.

After being happy with the sniper design, I moved to the business clothes exploring a new side of her. I still wanted some side of the tactical look, that would be easy to put on even if she was in her casual clothes. Later on, went over small designs of her glasses when I dropped the idea of a red mask. Her red lips would play a role in her design as it would catch the interest of the viewer but also show she is bold and daring like a fox.

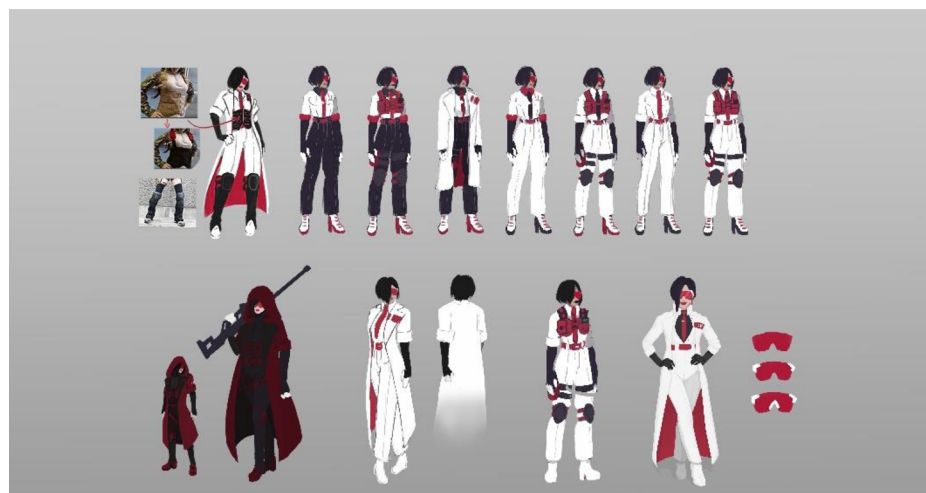


Figure 11: Athena's concept ideas

I wanted her coat to be iconic and easy to spot. Making the inside coat read made it easier to read the silhouette and her white clothes popped out more. With that, it was mostly a game of adding accessories and details.

Athena's hair was somewhere in between thinking of the design. I want her to have a short hair but with this thin long ponytail under it. Later on, it did not fit the design and searched for other options. Still keeping in mind the short hair, I tried some long hair versions also. Researching what could possibly be the usual French-like hairstyle. The short bob cut caught my interest.



Figure 12: Athena's hairstyle variations

Before creating the Athena logo, I didn't plan to make any logos but when I did one for Fenrir, it felt fair to do for Athena as well. The first couple of designs were simple ideas. Option D however was the one I was stuck on and didn't want to leave it. This logo was used for Athens Security Service and Athena's accessory on one of her outfits. Creating a logo with idea of a spear and chemicals created E and H design. I picked H's design of a spear that has chemicals inside, decorated with leaves leading it down.



Figure 13: Athena Company Logo

4.6.3 Antagonist Soldiers

Our Antagonists soldier were quite similar in research to the protagonist. The only difference was exploring masks covering the whole face. I wanted the soldiers to look all the same like copies of each other.

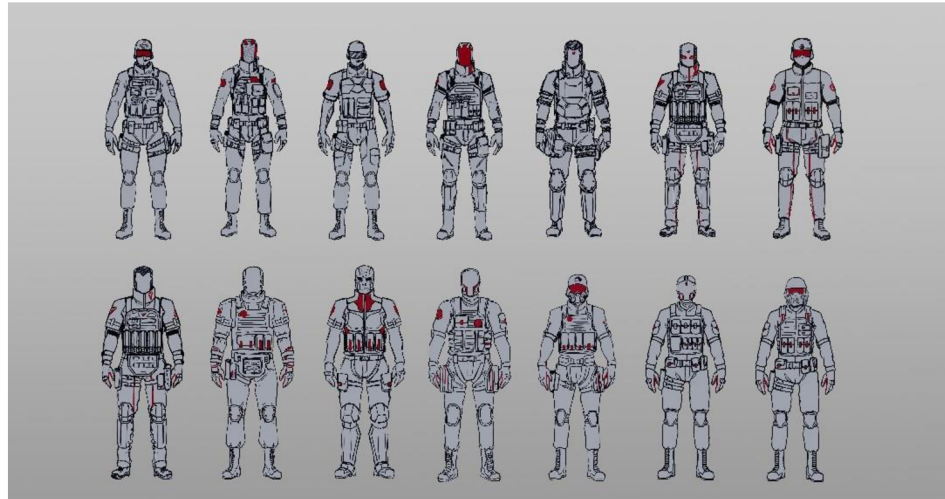


Figure 14: Athena's security service concept

Going over the designs, I ended up with last 3 sketches that felt fitting for the security. First one was usual soldier design, second design was a heavy armoured soldier with no gas mask, the third idea made different design of the mask but mixed the uniforms of the first and second. These designs were later on the foundations for final concept sheet.

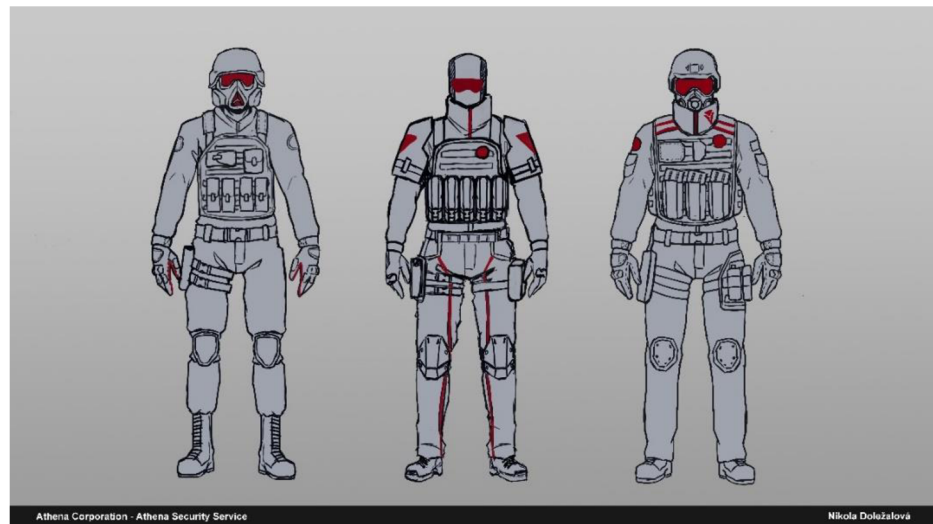


Figure 15: Athena's security service concept part 2

4.7 Final Sketch

4.7.1 Protagonist

Final sketches of Doc were colour variants and camo patterns on clothes. I went with something between the first and last colour variants, I wanted to keep the camo pattern. As the previous sketches were to some extent highly detailed it was all about the colour balance. The player will only see Doc's hands. The bluish-grey body suit and gloves with small blue stripes are recognisable and clear that player plays as Doc.



Figure 16: Doc's finalized sketch colour swatches

There are two versions of the masks with two different colours. Silver colour for normal contractors and for combat medics employed would get this blue striped.

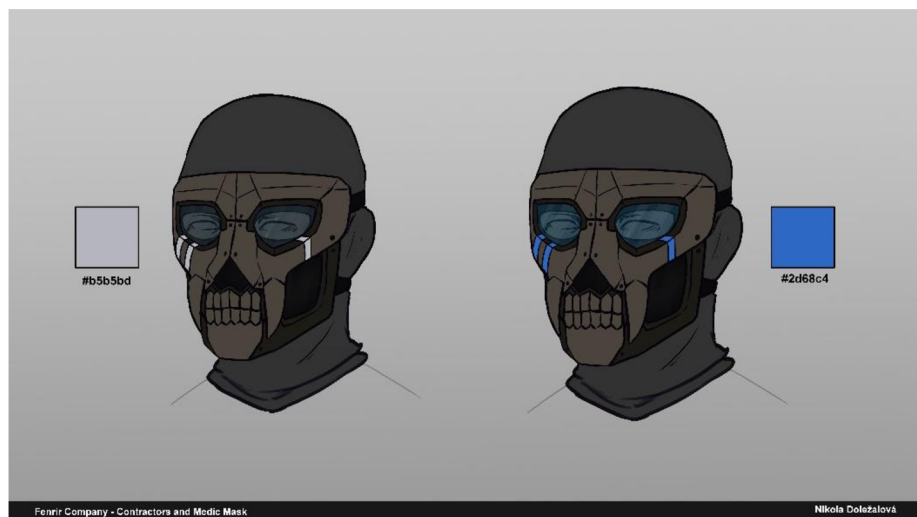


Figure 17: Fenrir contractor mask

4.7.2 Antagonist

For the final design, I decided I don't want the sniper role to be there at all. I wanted to focus on her business scientist clothes, the idea was of full white clothes and the coat to have red inside. I still wanted to see a different options before committing fully to the white clothes, as main colour being white and red and black being the supporting colours. Each design had couple colour swatches. The idea was behind, will the black colour clash or support the white? It didn't work out. After reviewing the ideas, I came to the conclusion it clashed and didn't fit the original idea. The decision was between C and D designs, where I picked both for reason as I didn't want to give up on the D design. C design would work for dealing with the customers and outside social affairs. As for the D design keeping her casual look for inside of the company. Being busy, dealing with the affairs from her office, still keeping professional and smart look.



Figure 18:Athena finalized concept

In Figure 19 Athena wears the said designs with different logos. Before I decided on logos I wanted to see first how it would look on her coat. As it was part of her representation.



Figure 19: Logo variations on Athena

4.7.3 Antagonist Soldiers

For the finalised sketches, I have three types of soldiers that are employed under the Athena Security Service. Sniper on the left, wearing half ghillie hood and half gas mask. Middle and right are very similar yet I gave the middle one as a heavy soldier with a shield, shoulder pads and lower body protection. The soldier player would mostly see would be the last. Soldiers will be wearing a full black uniform with red lines and red visors except for the sniper.



Figure 20: Athena's security service finalized concept

4.8 Character Concept Sheet

Turnaround concept sheets for all the characters.

4.8.1 Protagonist

Doc has all the bags and pouches in brown colours with the light camouflage pattern as well as the hoodie and pants. On his right shoulder pad, he has Fenrir patch and on left shoulder pad he has on black and silver the combat medic patch. Making the backpack medium size gives Doc more flexibility than if it was a bigger backpack. The bigger backpack is compensated with half of its size bag that is connected to his belt. Doc has two pouches of rifle ammunition on his chest with, the necessary medical equipment. On the belt are two smaller pouches of pistol ammo. The left thigh has a holster for a gun as the right thigh has extra ammunition needed. Hoodie sleeves reveal a bodysuit that protects him and controls his body temperature from cold. Knee pads and mask have scratches proving they have been worn multiple times.



Figure 21: Doc turnaround sheet

4.8.2 Antagonist

For Athena's turnaround sheet I have picked her business dress. The front view of the dress is accompanied by the coat showing that she lets the coat rest on her shoulders. Adding the earrings from her casual outfit. Back view shows the design of the skirt. Gloves have red palms, same as her shoes have red sole.



Figure 22: Athena turnaround sheet

Athena's closeups are not polished. On a right are four usual expressions: her smiling, tearing up, annoyed and angry commanding people.

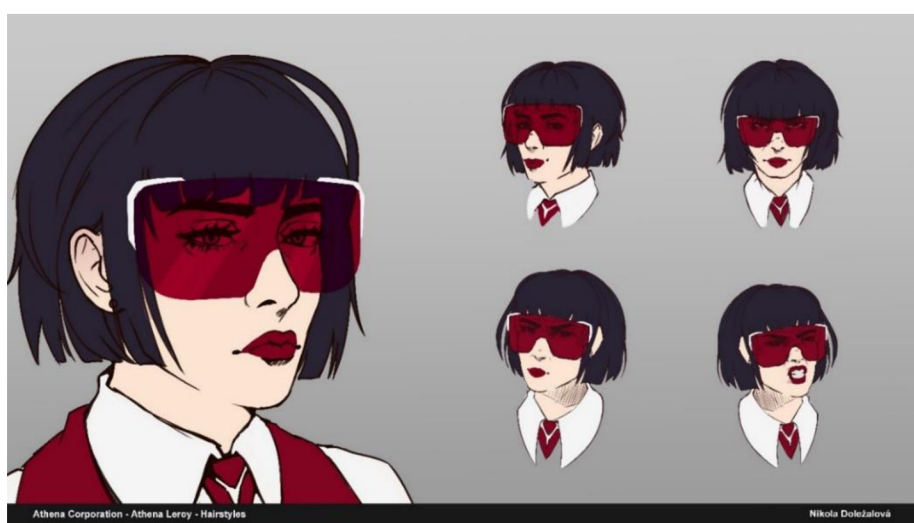


Figure 23: Athena expression sheet

4.8.3 Antagonist Soldiers

The security service uniform was made in shades of black for easy readability. Helmet covers nicely the whole head and the rest is covered fully by the gas mask with a red visor. Gloves are in a similar design as Athenas, with red palms. Smaller backpack and additional bag with extra equipment.



Figure 24: Athena's security service turnaround sheet

Conclusion

While working on this project, I learned a couple of things. Not just about the process but also what I should be expecting and what the company would be expecting from you. Working in this environment requires good knowledge of programs and fundamentals. It's not all about drawing but the ideas you can offer to the point you may need to give up to 40 sketch designs. There are multiple fields that grow into different branches. For example, concept art can be separated into character design and environments. That is just the artistic field, as some people work with 3D or animations. Not to forget the user interface, narrative and technical team. As there are a lot of branches and being employed for the job you have applied you can end up working in a different field, you need to adapt as its very competitive. Hearing the stories of an experienced artist who left this field explained to the younger artists. It is not enough to just draw but also have a knowledge of the 3D programs. This, of course, doesn't count only for the gaming industry that grows with each day but also for animation.

Researching about the video games industry. I found out that there are not that many schools that teach the craft of concept art. If there are, they are primarily located in Asia, the United Kingdom or the United States. But if we look for more private schools or online classes, which are a possibility but are very expensive if you are a student. In the Czech Republic, new university schools opened in 2021 focused more on game design. In my view, this makes sense as more people are interested in creating a game or playing new games. This industry grows with each day and has multiple possibilities.

Creating a game from the bottom, especially when you need to think of the story, mechanics and character, is difficult. Counting in that I only made an account and design of the characters, I would have to make also fully 3D characters, additionally would need an extra time. But the main focus was on representing a game idea with a finished concept.

I wanted to make a different kind of game, but I instead wished to stay to the ground and target a bigger audience. Who are first-person shooter players? These people, of course, enjoy more multi-player games, but I decided on a single-player game. The story of the protagonist having some agenda against this bad guy goes through multiple people who work for him or are connected with the person to get his revenge is quite well known. The

main focus was the characters and the story of the game. Bringing instead a person who is the perfect soldier switching it with a combat medic brought fresh air into the idea. A female antagonist is not that typical. If anything, having a female as the protagonist to also attract the female audience. When researching this, I understood that for the company to even make a new game, they need to have a good audience and support. That's why usually, games can crossover as overly sexualized.

After finishing the project, I realized some minor mistakes and things I could have improved. Looking at it, I noticed if I had more experience or more projects like this, it could have been approached differently, having the knowledge I have gained now. I was grateful for the help of others who have been through this project with me. Their opinions and which designs they liked showed me everyone has their own taste but agreed on similarities. I learned that I could transfer the communication of design without telling them precisely what the game or characters are about.

List of used literature

3dtotal Publishing (ed.) *Character Design Quarterly 12*. Worcester, England: 3DTotal Publishing, 2020a. ISBN-13: 9781912843022

3dtotal Publishing (ed.) *Character Design Quarterly 13*. Worcester, England: 3DTotal Publishing, 2020b. ISBN-13: 9781912843039

3dtotal Publishing (ed.) *Character Design Quarterly 16*. Worcester, England: 3DTotal Publishing, 2021a. ISBN-13: 9781912843060

CROSSLEY, Kevin. *Character design from the ground up*. London, England: Ilex, 2014. ISBN-13: 9781138428126

GURNEY, James. *Color and Light: A Guide for the Realist Painter*. Andrews McMeel Publishing; Illustrated edition. 2010. ISBN-13: 9780740797712

KENNEDY, Sam R. *How to become a video game artist: The insider's guide to landing a job in the gaming world*. Watson-Guptill Publications, 2013. ISBN-13 9780823008094.

LILLY, Elliott J. *The big bad world of concept art for video games: An insider's guide for students*. Culver City, CA: Design Studio Press, 2015. ISBN-13: 9781624650369

SILVER, Stephen. *The silver way: Techniques, tips, and tutorials for effective character design*. Culver City, CA: Design Studio Press, 2017. ISBN-13: 9781624650345

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