



Rewarding exploration in Deus Ex:Mankind Divided's Prague city hub

Clémence Maurer

Level designer, Eidos Montréal



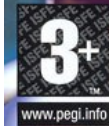
WHO I AM...



WHO I AM...



HEAVY RAIN
THE ORIGAMI KILLER



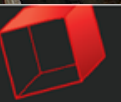
UBISOFT

PAL Nintendo



...AND WHAT I DID

- Palisade bank





...AND WHAT I DID

- Side mission team





...AND WHAT I DID



- Prague city hub exploration, intentions and navigation.





DESIGNING MEANINGFUL EXPLORATION CONTENT





- **Exploration setups?**
 - *“Slices of life designed to tie narrative, exploration, navigation and challenge together”*
- **Compelling, deep lore**
 - Transhumanism
 - Cyberpunk
 - Anticipation
- **Why do we need them?**
 - We need to keep the player busy
 - We need to keep the player interested
 - We also need to flesh that universe out





The main story is the **core** that makes us understand the **state of the world** and lays the very **foundation** of the **universe** we tell you about.

- Huge stakes
- Multi-faceted characters
- Relatable, dramatic world events
- Intricate, mature storyline





Side missions take the player deeper into the world and offer near unmissable reasons to get side tracked, along with truly unique narrative and gameplay experiences



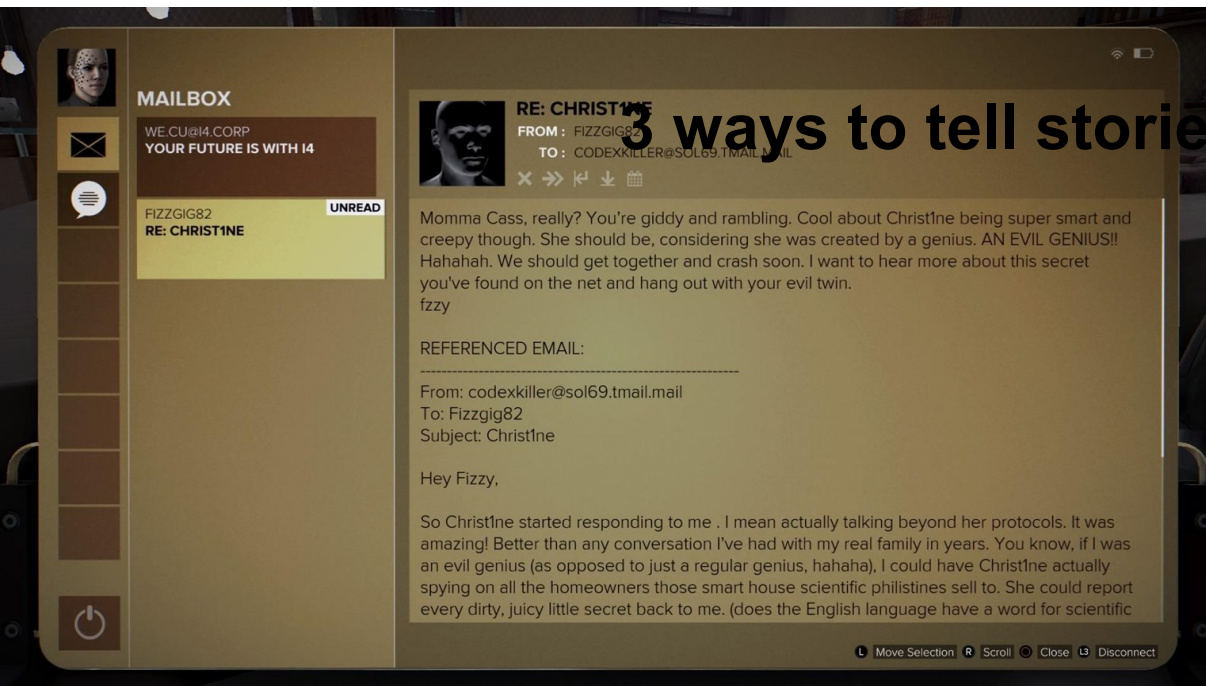
- Complex, scalable stories and characters
- Choices and consequences
- Huge replayability
- Exotism



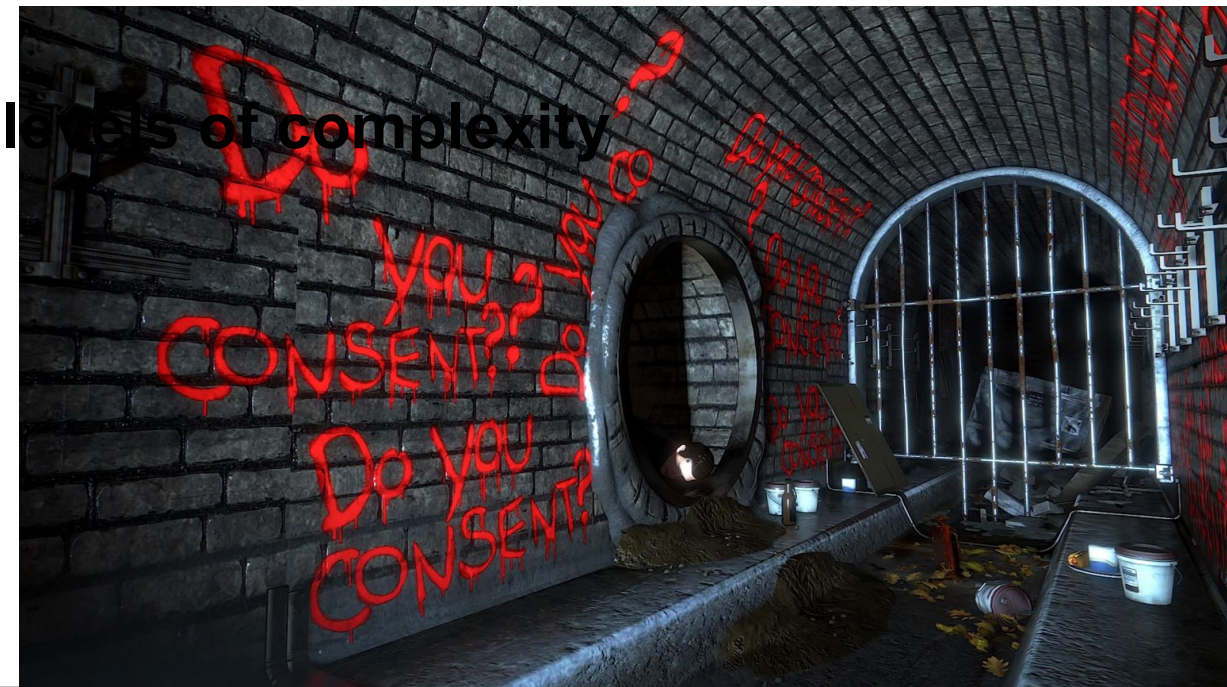


Exploration setups complement the existing content and **breathe life** to the city and its **people** in their many tiny **details**

- Third and last layer of content
- Taps into player's imagination using show don't tell and subtle narrative threads
- Make the world fun to navigate around as we dig out its secrets and meet its challenges



3 ways to tell stories, 3 levels of complexity







The Deus Ex experience

"I'd rather do something that's an inch wide and a mile deep than something that's a mile wide and an inch deep"



$$\rho = \frac{m}{v}$$

density

mass

volume

- Compulsive attention to **detail**
- Tailored to your **playstyle**
- No **waste** of space.
- **Everything** means **something**.
- **Crafted** with love and OCD



ID	Title	Item	Building	Location	Summary
SH	Semidet	SH11	Apartment Hecol (Bank)	Modern District - SI Apartment	
SH	Semidet	SH12	Near Room (Severe)		
SH	Semidet	SH13	Office (Bank)	Modern District - Bank	
SH	Semidet	SH14	Billboard (Shocking-roof)		
SH	Semidet	SH15	Barre Jernmoo		
SH	Semidet	SH16	Pier Youth (Bank)		
SH	Laure Ende	SH2.1	Force conversation TF29 HQ	Modern District - TF29	
SH	Laure Ende	SH2.2	Safe House Luker	Modern District - Apartments	
SH	Laure Ende	SH2.3	Hotel Room (Apartment)	Old District - Apartment	
SH	Laure Ende	SH2.4	Dark and dark TF29	Modern District - TF29	
SH	Laure Ende	SH2.5	Force Conversation Apartment	Modern District - Apartment	
SH	The Harvester	SH3.1	Crimson	Peas District	
SH	The Harvester	SH3.2	Old Criminals	Under Train Track	
SH	The Harvester	SH3.3	Apartment (Bank)	Peas District - SI Apartment	
SH	The Harvester	SH3.4	Shop of Politician	Peas District - Shop	
SH	The Golden Ticket	SH4.1	Fake Checkpoint	Old District	
SH	The Golden Ticket	SH4.2	Fence/Trident	Peas District - Courtyard	
SH	The Golden Ticket	SH4.3	Near - permitt 001 (Apartment)	Peas District - Shop	
SH	The Golden Ticket	SH4.4	Near - permitt 002 (Right Apartment)	Peas District - SI Apartment	
SH	The Golden Ticket				
SH	The Golden Ticket	SH4.5	Official shop - server room	Place - Shop	
SH	The Last Harvester (Prague 2)	SH5.1	Witness' apartment	Modern District - Apartment	
SH	The Last Harvester (Prague 2)	SH5.2	Doctor's apartment	Old District - Apartment	
SH	The Last Harvester (Prague 2)	SH5.3	Killer's place (severe or violent)	Peas District - Apartment	
SH	Friends on the inside	SH6.1	Jurak's apartment (defamation)	Peas District - Apartment	
SH	10010000	SH7.1	Interactive Billboard (hack) - small		
SH	10010000	SH7.2	Defiant messages (Closed Shop)	Modern District - Shop	
SH	10010000	SH7.3	Storage - Clock	Modern District - Storage	
SH	10010000	SH7.4	Antique under (fake)	Old District - Shop	
SH	Cult of personality	8.1	Cult's server quarters		
SH	Cult of personality	8.2	Shop		
SH	All in the Family	SH9.1	Strip club police table	Red Light	
SH	All in the Family	SH9.2	Snake (Dead? apartment)		
SH	All in the Family	8.3	Backyard truck	TBD	
SH	Buy for One, Sell for Two	SH10.1	Ranata's shop	Peas District - Shop	
SH	Buy for One, Sell for Two	SH10.2	Official office	Place - Shop	
SH	Buy for One, Sell for Two	SH10.3	Weapon part 001 (pass)		
SH	Buy for One, Sell for Two	SH10.4	Weapon part 002 (Healing challenge)		
SH	Buy for One, Sell for Two	SH10.5	Weapon part 003 (Thief infiltration)		
SH	Painted Black	SH11.1	Connected after Ave (outside Keller)	Peas District	
SH	Painted Black	SH11.2	Small apartment under train tracks	Under Train Track	
SH	Painted Black	SH11.3	Body dumping ground	Peas District	
SH	Painted Black	SH11.4	Drop Document	Old District	
SH	Painted Black	SH11.5	Drop Bank at (light apartment)	Modern District - SI Apartment	
SH	Painted Black	SH11.6	Mr White's apartment	Old District - Apartment	
SH	Painted Black	SH11.7	Target kill - escape	Place - Veto	
SH	Painted Black	SH11.8	Cleaning Shop	Modern District - Shop	
SH	Painted Black	SH11.9	Cave - small shop cleaning shop		
SH	Handle with Care	SH12.1	Strip club - Room 2nd Floor	Red Light	
SH	Handle with Care	SH12.2	HQ - smuggler	Under Train Track	
SH	Handle with Care	SH12.3	Storage - truck smuggler	Modern District - Storage	
SH	Mean Night	SH14.1	Mother looking far horizon	Old District	
SH	Mean Night	SH14.2	Body in junkyard	Old District - Junkyard	
SH	Mean Night	SH14.3	Drug dealer	Peas District - Apartment	
SH	Mean Night	SH14.4	Dealer's hangout		
SH	Mean Night	SH14.5	Neon Factory (severe)		
SH	Phantom LIMB	SH15.1	Limb Clinic	Old District - Shop	
SH	Phantom LIMB	SH15.2	Friend	Peas District - Apartment	



Few modules, many variations

Building blocks for exploration

1. Shops
2. Apartments
3. Storages



The “everything is linked” basic idea.

**Propping is the same, therefore locations
share a connexion**

Liquor bottles in that apartment?



Liquor bottles in that shop?

IS THERE A LINK??





Exploration key principles:

→ Any exploration setup will

1. Offer a **challenge**

2. Grant **Rewards**

No sense of progression

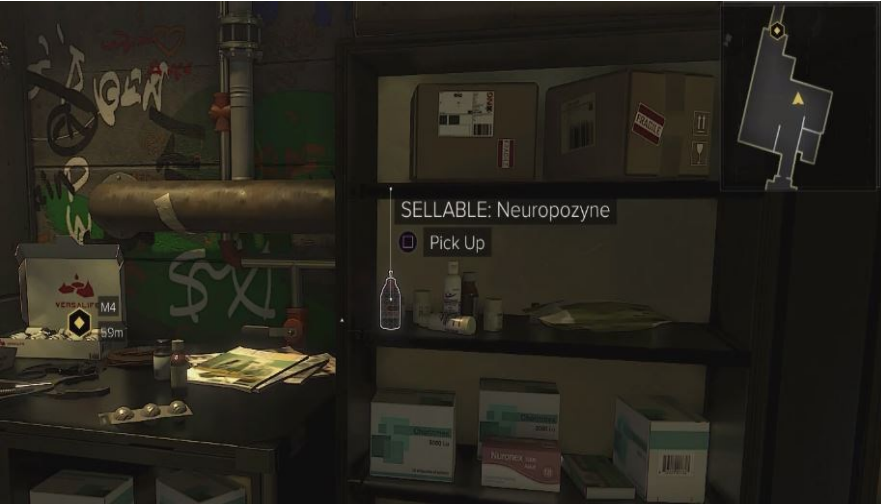
1. Create subtle **links between locations**

1. Tell compelling **mini-stories**

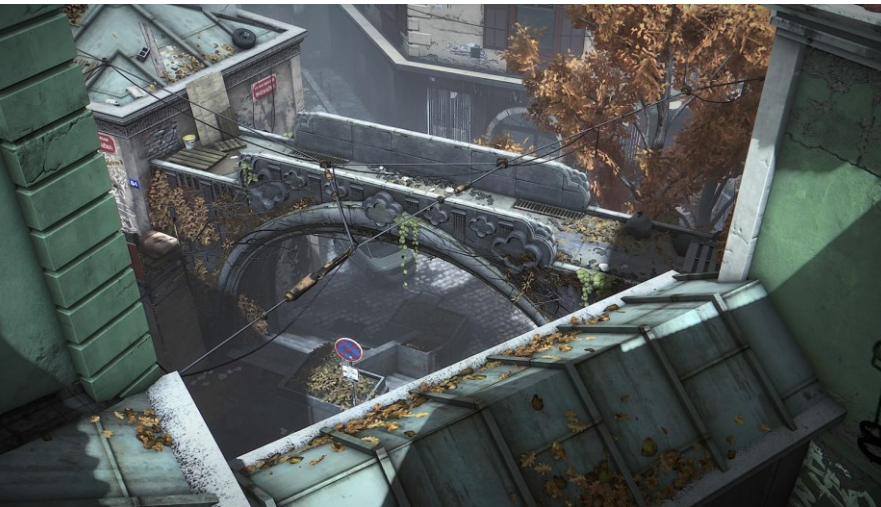




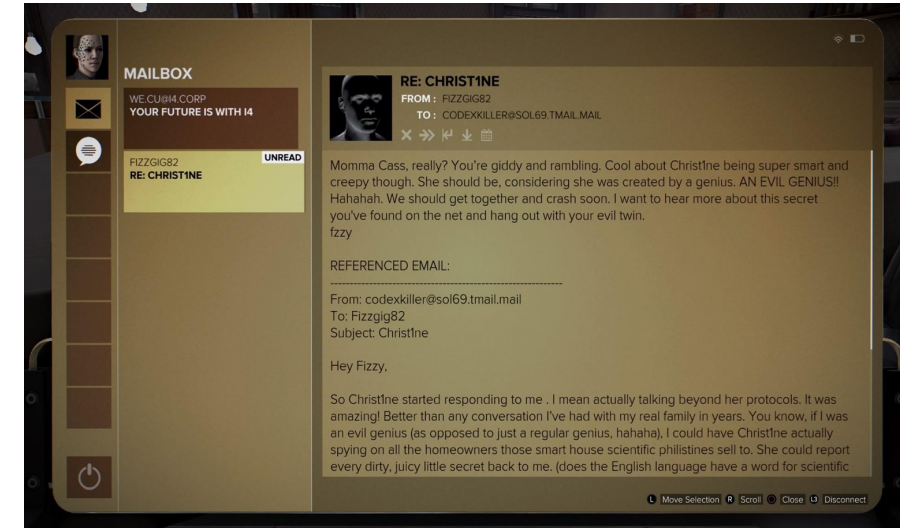
Exploration reward pillars?



Functional



Narrative



Navigation





Exploration setup types:

- 24 explorations setups were created (the documented ones...)
 - 20% standalone
 - 70% medium
 - 10% large
 - Only a handful are linked to critical path locations and side missions





GERN-ZLATY

30



Huge, spread out setups make **comprehension** and **memory work** very difficult

Find the sweet spot between **invisibility** and **over exposition**, Else the **impact** suffers.

Vary the rewards. Don't let a single **reward** category take every **other out**
(not too much anyway)





Task Force 29 : The exploration teasing hub





Human interests

→ Society has **fallen**. What happened to the people who used to **make it work**?



Ballet dancer turned bar owner / smuggler



Neural implant programmer turned house A.I developer



The stories must fit the universe's **key** events and the many ways they **impact** people's lives:
The **aug incident**, the **segregation**, the **police state**, the **population classes**...

We need to talk about **all kinds of people**...





Chemistry teacher researching engineered viruses

Former secret service agent suffering from personality disorders after botched implant removal

Opportunist looking for profit via aug evictions

Megacorp VP trying to sell exile to augmented people

Real estate shark hiding brain implant

Sculptor and painter looking to flee and find haven

Former city cop trying to facilitate the escape of augmented civilians

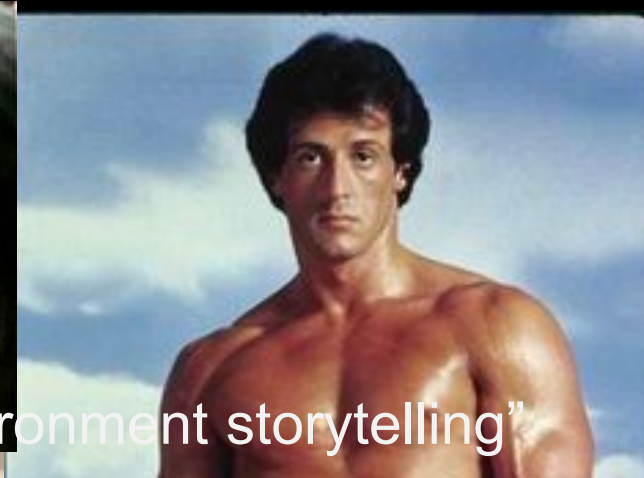
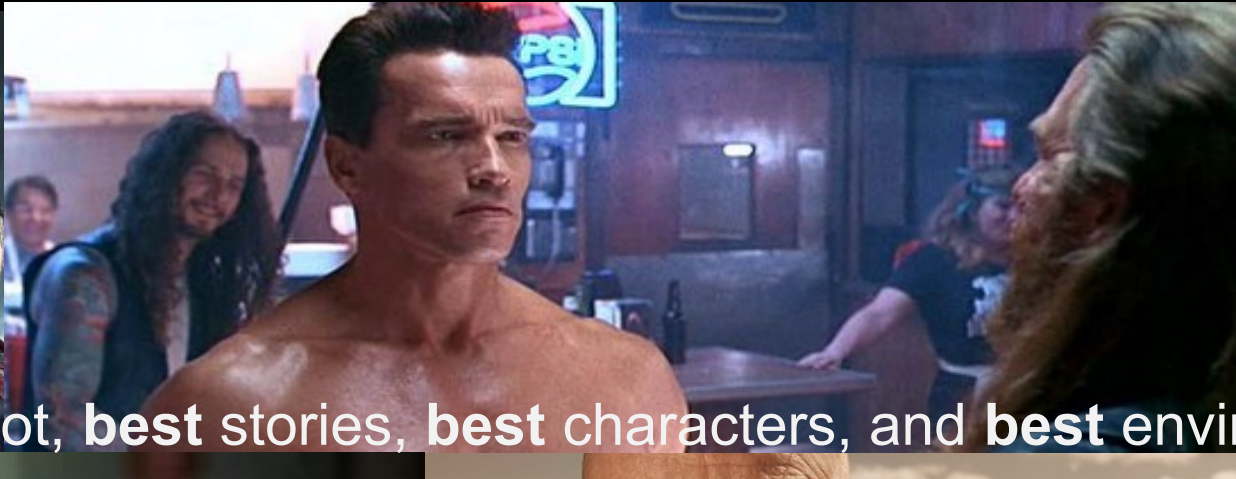
Augmented students banned from school

Young man struggling with guilt over friend's murder during incident





Unveiling people's secrets : making them cool but not TOO cool.



"I want your **best** loot, **best** stories, **best** characters, and **best** environment storytelling"





Unveiling people's secrets : making them cool but not TOO cool.

Next door neighbours?
I think not.

SMALL WORLD FEELING IS BAD FOR YOU!





The teenager with too many connections

- Even Prybil's parents were sent to Utulek, leaving him alone in a big fancy apartment
- Quit school due to violent anti-aug bullying **Blah blah**
- Connected with a group of smugglers coming in and out of Utulek's aug ghetto
blah blah blah blah
- Is also working with the local gangs, hiding "hot" weapons and getting money and contact
This dude was too many things !!
BLAH BLAH BLAH BLAH
- Came in possession of a whole map of the aug ghetto thanks to his contacts
- Gifted musician **BLAH !!**
- Was a Nietzsche fan with some "beyond good and evil" psychological stance.





Ordinary people...

...with a twist!

Finding the right balance between **dark secrets** and the ordinary **routine** of a **relatable** person

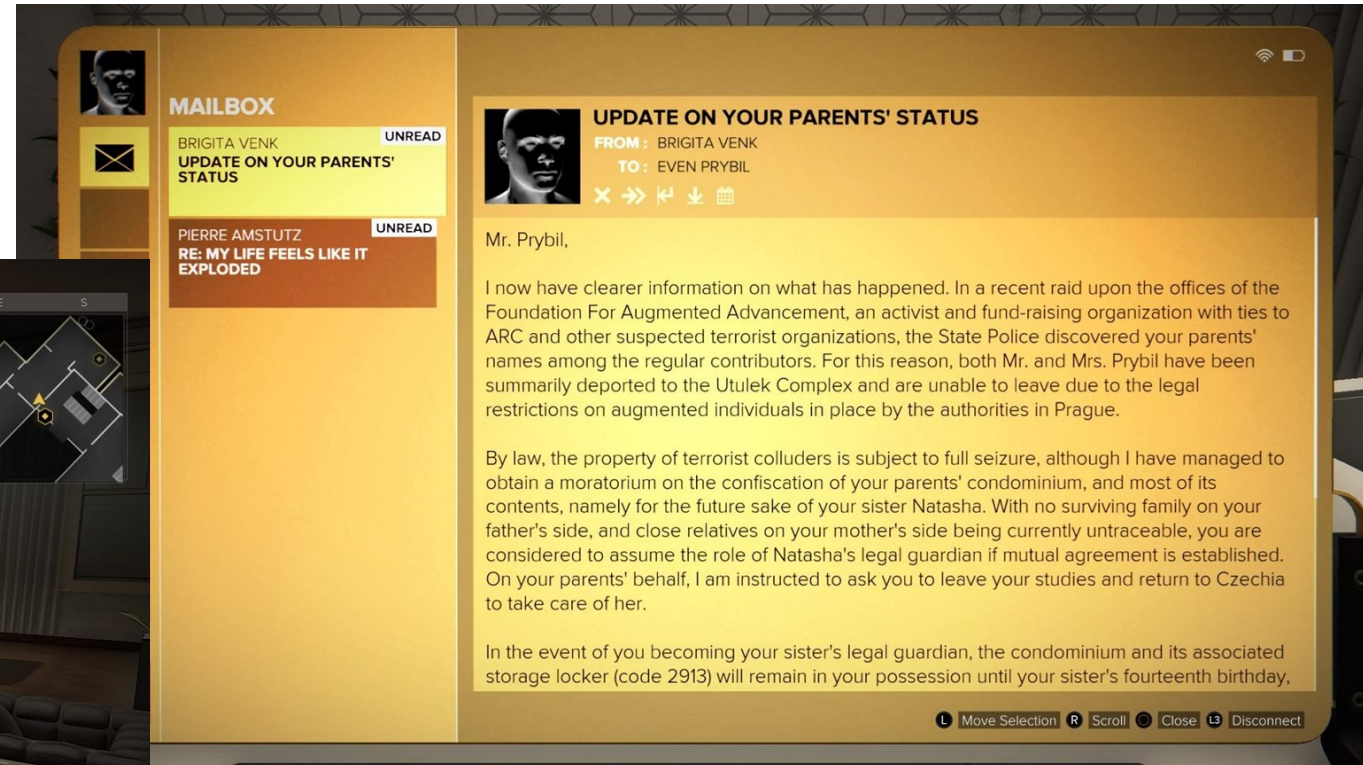
It's not about **downgrading** the stories, it's about keeping the people **human**

Emptiness makes you **panic**? Get a grip ! **Think of the many forms your rewards can take**





"It's a little convoluted. I finessed that a bit"™



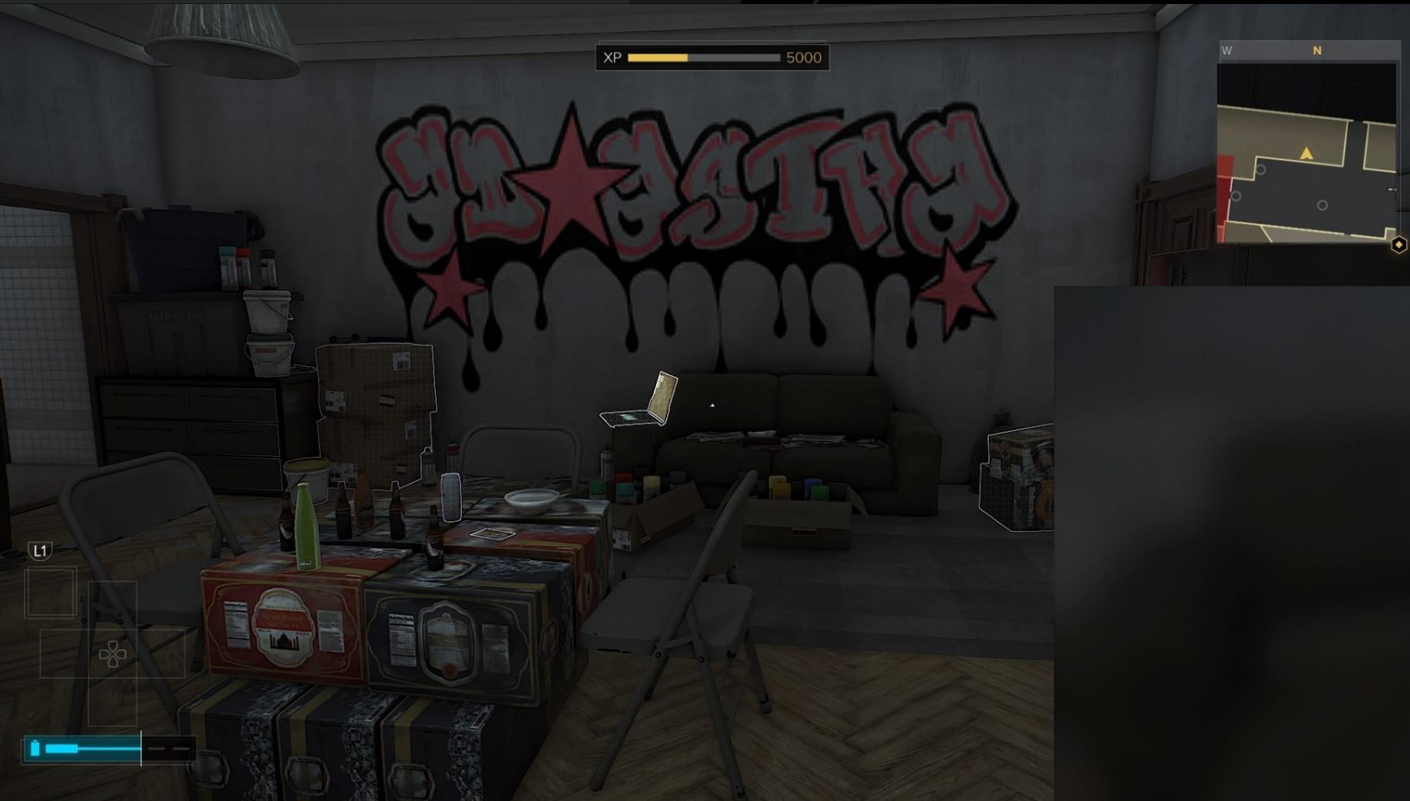


Respecting the world's state without dealing in absolutes

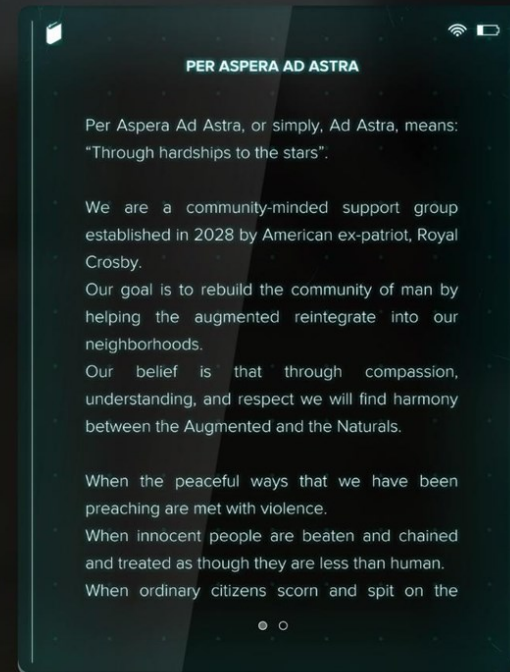


- “You live in the poor district? So you must be a miserable augmented hobo with an **addiction** issue, right?”
- “Or maybe you are a human **purist** who **hates** all augs and would report their **neighbour** to the deportation **police...**”





→ Give a twist to an exploration area.
Offer an **unexpected** reward.



(R) Change Page (O) Back





EXPLORATION REWARDS EVERYTHING!





Exploration has to **benefit** every aspect of the game and make **all** types of content **shine**...

- Most exploration setups in the game are **standalone** and **original**.

...from the most **important** missions to the best kept **secrets**.

- Some feature **special** rewards providing unique **advantages** during **missions**









→ Platforming and first person viewpoint?

AWKWARD!!!!



Clear, enticing, integrated navigation platforms

Remove the **navigation clutter**, they will only betray the player's **expectations** !

40

Identifiable **navigation thread** from all levels







The curfew : a nightmare turned into an opportunity

→ How a **new constraint** for one part of the game, **positively affected every others**.



00



CAR

DEACTIVATE

COST 1000



Multi-options exploration design : rewarding without frustrating

- Locations always have at least a **couple of ways in**.
- Navigation supports and enforces all of the game's **pillars**
- A lot of efforts are made to avoid “**magic locks**”





→ If navigation must be controlled = it must be crystal clear why from player's POV

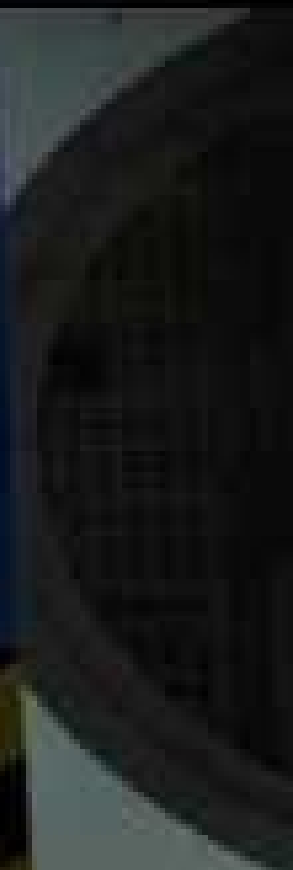




THE HUB

REPAIRS AND MAINTENANCE

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Side missions using Prague's layout : harmonizing pillars

→ How can Prague's exploration and design experience benefit already well crafted missions?

When a place perfectly fits within the world's rules, it shows ...

→ Collaborate and Harmonize: keep the experience on par with the game's pillars







CONNECT EVERYTHING !!! not...

- You're not the only one creating cool stuff. Best remember it.
- Overdesign is a lot less sexy that it might sound
- Too many connections make the world look fake and way too convenient





The philosophy of not locking stuff

→ Deus Ex's **skill objects** = **augmentations**

Exploration content is (almost) always there !

→ None of our augmentations are **given** through the main story.

→ Prague offers a **skill based** exploration design VS a **progression** based one





The philosophy of not locking stuff





The exception that confirms the rule

- If a setup is tied to a mission's timeline, we need to **lock the out of context content**.
- The explored area must remain interesting, useful, and tease the player into **coming back**



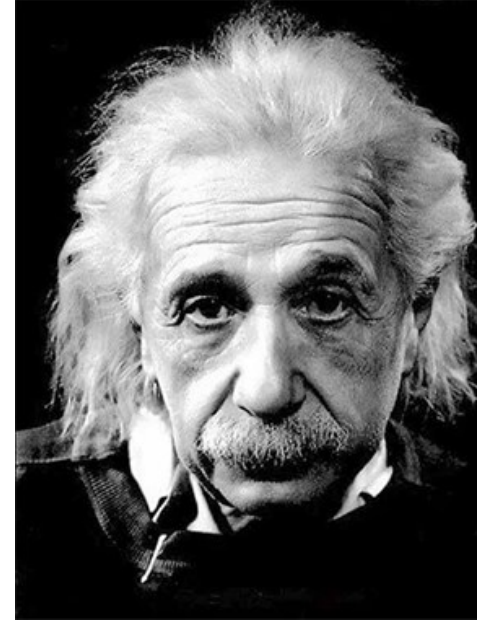


Awadalla's life crisis





No one actually visits the same place **twice** and expects it to be different for **no reason!**



Insanity:

Doing the same thing over and over again and expecting different results.

Albert Einstein

If a location is going to change, it should be the result of the player's action!
(most of the time)









Conclusion and design takeaways (with a twist...)

Know what people on your team **do**, and how your own work can **help** (and vice versa)

Players want to **explore** your world. If you need to block an area, **justify** the hell out of it.

Every **constraint** can have **benefits**. Think about how a constraint can enrich the **experience**.

Don't **change** things just for the **sake** of it. If you want players to **notice** your **valuable** changes, find **strong** ways to **convey** the message

LDs are the **keepers of the experience**. Doesn't mean you have to be rigid about it. Find **smart** and **rewarding** ways to twist that experience.





Getting over oneself in:Mankind Divided's Prague city hub

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Level designer, Eidos Montréal



Minor setups becoming major missions

→ Fear of design streamlining

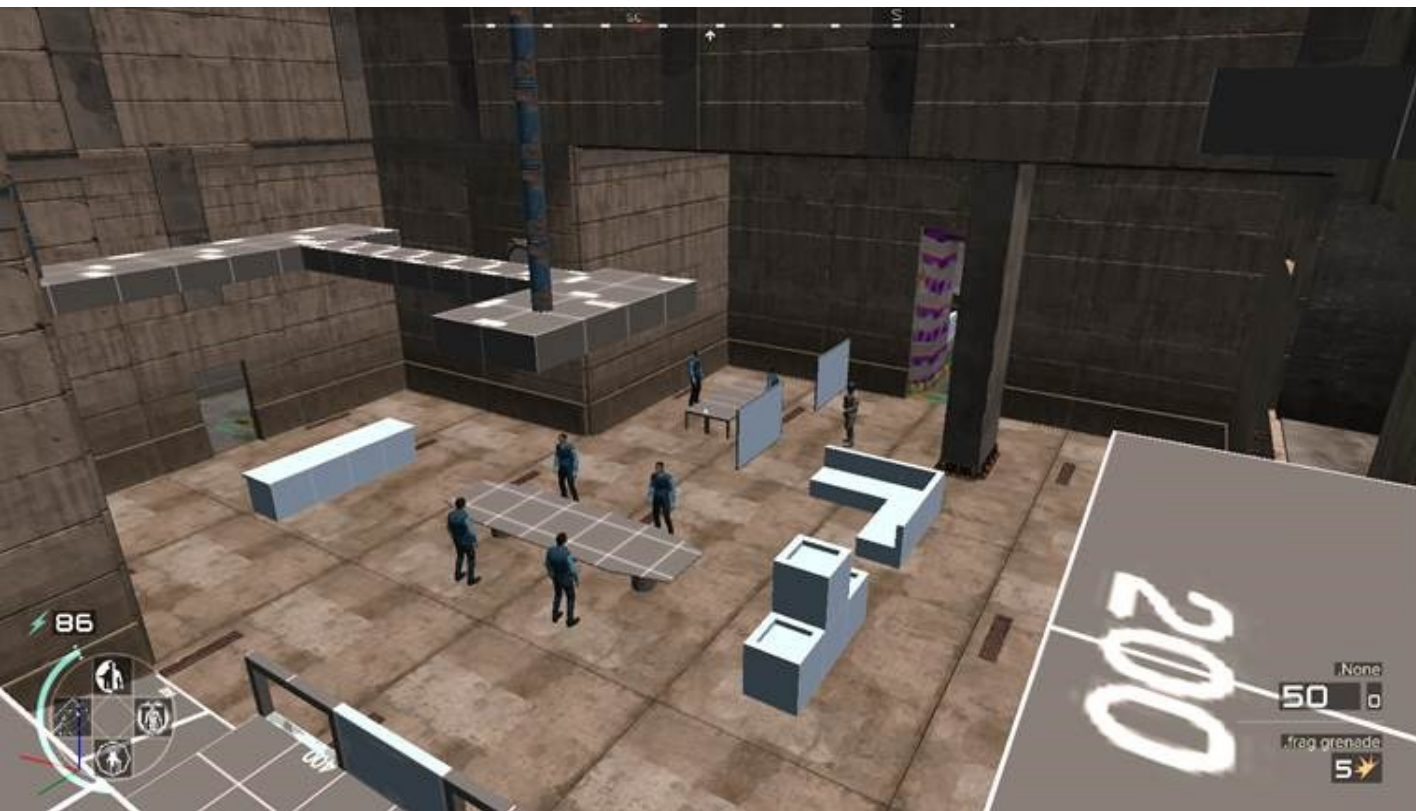
What's wrong with that?

→ Too much attention given to the 1%. Not enough on the big picture.





Casino as simple exploration setup



- **Secret** place, done in secrecy
- Given to **side mission team**
- Stumbled upon by **gameplay director**





→ Lose or lose situation = get out of your comfort zone



→ Explain yourself and fight the important battles



Josef's quest for existence





Alison complex's compound



- Big impact on **storyline**
- Major choice / consequence mission potentially leading to a visceral **debate** with key character **Allison**





→ What would become of Josef?

- ◆ Lose or lose situation = what's best for the game as a whole?
- ◆ ~~Some of us happy again!~~ ?
Irrelevant.
- ◆ People usually strive for good compromises and new options.







From small optional setups, we ended up with :

→ 2 polished critical missions supporting all of Deus Ex's gameplay pillars

AND

→ Cool exploration areas with their own storytelling, rewards and secrets.





- Optional content is great. But it doesn't have to die if it becomes part of a “greater plan”
- If more resources are invested in a setup, then it gains more chances to reach the quality and content you originally wanted for it.





Why so many secrets? Why the fear?

- Lack of process leads to frustration leads to isolation
- Growing perspective deficiency
- The feeling we have to do everything on our own and talk to no one...





The limits of documentation

Linked areas	District	Character(s)	Details	Notes speciales et conséquences	Challenge 01	Challenge 02	Challenge 03	Loot	Propsing theme
Magasin	Old	Employé	<ul style="list-style-type: none"> Content que les augmentés soient chassés de la ville car il a pu retrouver un travail a la place de l'un d'entre eux. Il a deux objectifs : dénoncer un augmenté dont il sait qu'il se cache, et voler son patron qui a un coffre caché dans son magasin 		4.2 Heavy Object	4.3 Hack panel	TBD	<ul style="list-style-type: none"> Argent Biocells 	Props du magasin dans lequel il est employé
Bank	Modern	Veuve alcoolique	<ul style="list-style-type: none"> Alcoolique et depressive depuis qu'elle a perdu son mari a Panchaea. Essaie tant bien que mal de conserver son travail. Son mari lui a laissé un 'héritage' dans une VIP vault. Elle n'ose pas encore voir ce qu'il y a dedans. Le testament indique qu'il s'y trouve de l'argent et un objet spécial ainsi que des informations importantes. Un jour de cuite pour se donner du courage, elle a retiré l'héritage de la banque et l'a caché quelque part...mais ne sait plus ou ! Trou noir. Quelques indices dans son appartement permettant de connaitre l'emplacement du paquet 	<ul style="list-style-type: none"> Si on trouve ce setup sur Prague 01, la dame n'a pas encore retiré le paquet des VIP vaults. On doit donc l'y chercher Si on trouve ce setup dans Prague 02, c'est le jeu de piste menant au storage / egout. 	5.1 : switch a travers mur / nanoblade	5.2 : remote hack	TBD	<ul style="list-style-type: none"> Argent Readable XP Praxis Alcool et Drugs Special Weapon Upgrade 	bouteille d'alcool, mobilier un peu riche mais poussiéreux car pas entretenu, c'est le bordel car elle cherche ou elle planque ses trucs mais trouve jamais. Photo de son mari et de Panchaea
Storage, Back Alley	Modern / Old	Cache Aug.	<ul style="list-style-type: none"> Appartement tout en désordre. Tout a été cassé, pillé. Il y a une cache en arrière, qui est vide. Grace a des messages, on peut comprendre que ce sont des augmentés qui se cachent ici. Ils sont parti pour avoir un RDV avec des gars de Dvali pour un Black Permit ou un depart vers une Rabbiah On trouve leurs corps dans un storage appartenant aux Dvalis dans une back alley. 	<ul style="list-style-type: none"> Reutiliser flyers de golem city du recruteur de santeau 	1.2 Punch Wall	1.3 Heavy object	1.3 Heavy object	<ul style="list-style-type: none"> Storage Argent Readable Pocket Secretary Data Stick 	Peinture ; Appartement détruit
Storage	Old	fanatique religieux	<ul style="list-style-type: none"> Un petit groupe de fanatiques persuadés que les augmentations sont un cadeau de Dieu. Ce groupe organise des rencontres clandestines d'une nouvelle religion / secte appelée le "techno - creationisme". Ils ont imprimé pas mal de flyers et de dessins dépeignant une humanité augmentée et divine (comme nos posters de DX ici). La secte sont en train de prospecter dans les égouts pour monter leur propre église et sanctuaire. 	<ul style="list-style-type: none"> Lieu de culte secret accessible dans les égouts Pourrait être lié au vieux fou qui parle des tremblements de Terre dans un autre endroit des égouts Encounter avec le chef de l'ordre. On pourrait rejoindre leur église en tant que Dieu machine pour loot spéciale! 	22.1 : hyperjump / medium crates	22.2 : Break object / melee	22.2 : Break object / melee	<ul style="list-style-type: none"> Praxis Mines Readable XP Drugs Pocket secretary + argent Special weapon Biocells 	fascicule, dessin a moitié religieux mélangeant organique et mecha, et la supériorité de la tech sur la chair. Biblique, twisté, HR Giger. Voir pour tag dans la ville.



The limits of documentation

- Constant need to justify to others what I was doing and why made me lose sight of what I actually needed to do.
- Overdesigning, overdetailing comes from not trusting the value of your work
 - ◆ Made worse if you think no one takes it seriously.
- Keep the detailed documents for yourself. Use brevity to communicate with others.





ES11 : Zenith

Storytelling intentions / Main “state of the world” topic :

- Mental illness and personality disorders caused by neuronal implants
- Use of brain implants in the intelligence services

High level story :

- Former intelligence agent turned security shop manager
- Neuronal implant caused mental alienation. He had it removed in clandestine clinic that increased his mental troubles.
- Has persuaded himself that he did something awful during the aug incident and is being hunted by someone.
- Former handler and friend is in fact tracking him in order to try and help but is afraid that his coming forward will make the man go nuts.

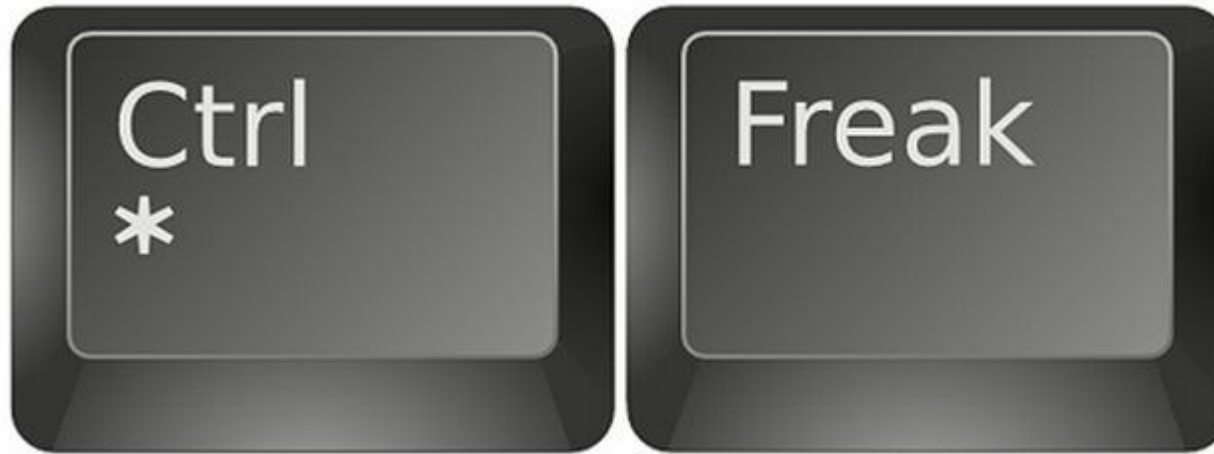
Present setup and other requirements:

- He can sell things and has special info lines hinting at setup
- Basement with gameplay and storytelling setup
- Former handler has temp accommodation in old district complex with text messaging available with potential choice / consequences
- eBook about the use of brain implant in intelligence services and their various applications (chameleon agents with pheromone enhancer or inhibitors, etc)
- Belltower vault keycard +VIP locker





Who **created** what doesn't **matter**. Care about the **work**, not how you **feel** about it.



Criticizing it

Fearing it

Becoming it





Human experience takeaways

Designing for the **1%** is ok as long as it doesn't take your **100%**

Feeling **alone** doesn't mean that no one **cares**.

Get back **perspective**. Sometimes that means **letting go**.

Keep asking for help. Keep talking. Keep nagging.

Your ideas are not fine china. They need to get 'dirty' **travelling** inside other people's minds...

Stop **expecting** people to **know** what's in your **head** !

Escape temptation to '**screw it all**'





Thank you!

Thanks these guys for their invaluable feedback, friendship, support and incredible work!

- The LD team (Jean-François meiffren, Julien Hantz, Sylvain Douce)
- The AI programming team (Alex Desjardins, Guillaume Bouilly, Jean-François Gautier)
- Writers (Rayna Anderson, Kasper Hartman, Steven Gallagher)

And all of DX's team

<3





CUT SLIDES



Too subtle, is that a thing ?

Do we need to **show** them on a **map** ?
Do we need a **system**?
Do we need to **force feed** our story and connection to make sure they are **understood**?



Exploration setup's enticing system should be just as subtle as the actual exploration setup...





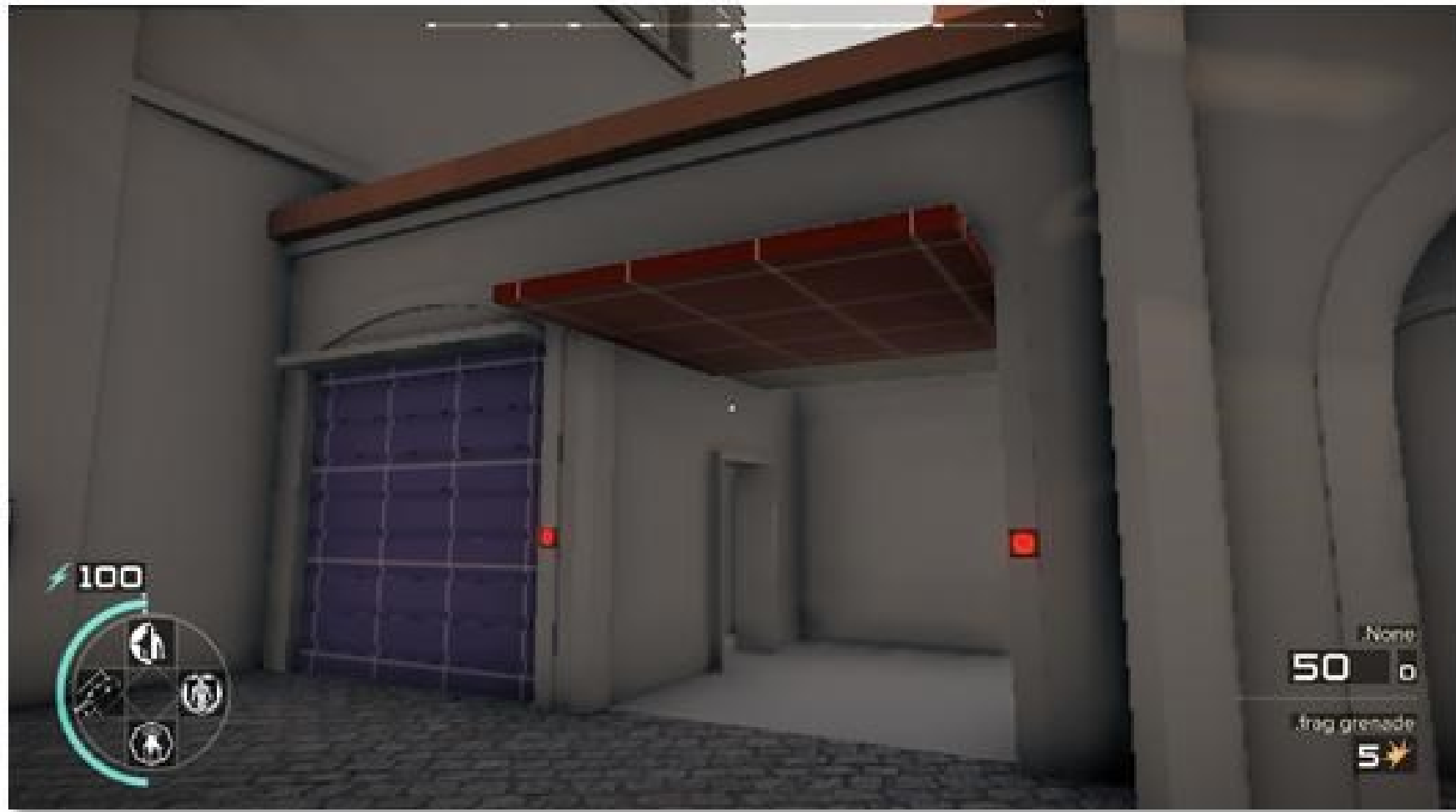
Casualty : “Handle with care” mexican stand off

- Keeping ‘**show don’t tell**’ exploration and discreet side content is ok.
- Having 2 fat slices of powerful content in the **same** location, is not.





→ Multi-tasking objects?



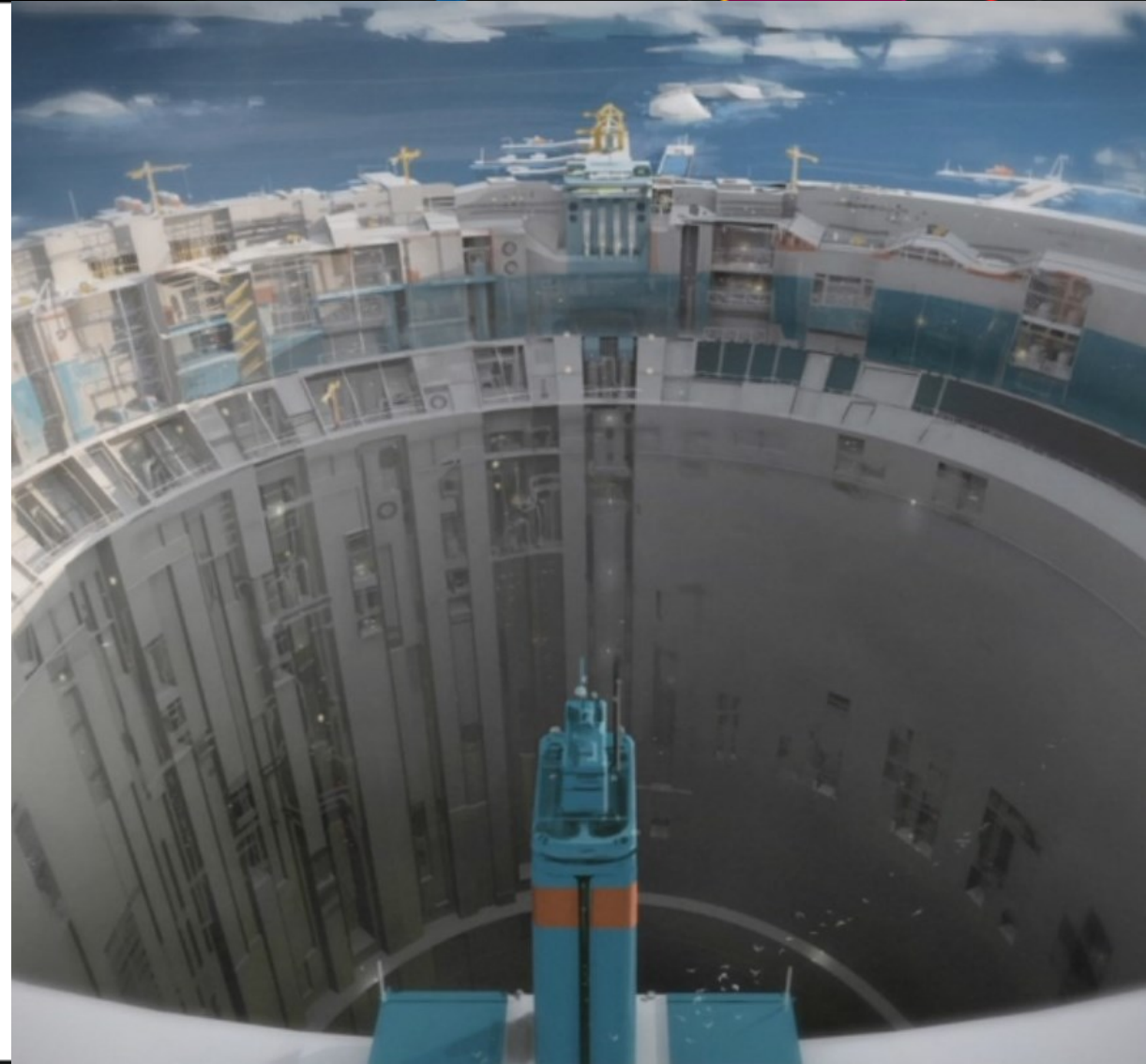


Balancing challenge through multi-options oriented design

→ Prague's sub-navigation design rules:

- ◆ **Multiple** approaches must be supported for **critical paths** and **side mission**.
- ◆ Short passages favorising orientation.
- ◆ Proper situation **assessment** on from all entrances and exits
- ◆ Support “**anticipated**” accesses whenever possible
- ◆ Chaos **escape** and **stealth** must be possible, if **not easy**.





Shops, Apartments & Exploration

Basics for exploration construction...

[Base definition]



Objectives :

- While exploring, the player wants to tell himself stories according to what he see or does...
- We need to create setups that immediately make sens (cheaply too)

Constraints:

- The less generic apartments and shops we have, the better. We have to ensure originality.
- Production cost has to be low, narrative and gameplay value have to be high

Solutions :

- Apartments and shops must always be custom made
- **Create sense with only one prop !**

- > Every shop in Prague will be custom !
(else we'll lose important landmark and vital meaning)



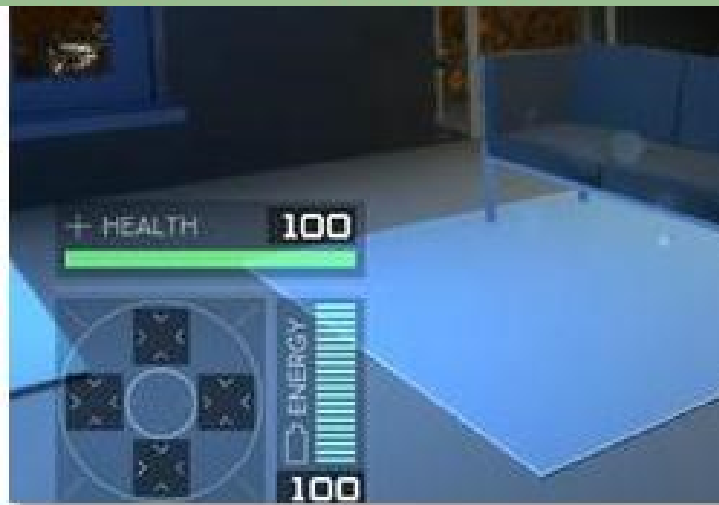
ITEM MANIPULATION

LT ROTATE  DROP RT THROW

→ Street level VS Vantage points
→ Open hubs VS Missions with part of a hub

- Same level navigation
- Realistic and practical
- More difficult to entice and offer vantage points from main routes

Use case : Prague's standalone apartment



Keep the core. Discard the fluff.

Sewers : from ugly child to connected ecosystem

→ Empty mandate with no clear purpose other than 'it must be there'

Wild Card !

→ Turned into a 'city below the city' destined to promote main and side content, as well as proposing its own ecosystem.



- ★ Every citizen and cops are replaced, offering a brand new LBW setup
 - People roaming the city at night are quite different than the common day worker mostly present in the day
 - For example, the Modern district at night is hobo territory, a blend of downtown LA and Robocop's Detroit danger filled streets.

- ★ Narrative voice overs and NPC's conversations react to the evolving context and state of the world. Not one person says the same thing as someone from a previous visit.

- ❖ Last but not least. new side missions are now available, even more intricate and fascinating at those from the first act

The broken multitool effect

→ The dangers of assuming other people's roles ?

→ You might end up have a “reputation”

- Arrogant ?
- Defiant ?
- Wild card ?
- Sneaky ?
- Dangerous ?

Prague: how is it more important than the rest ?

- 3 visits, so we have to keep the player interesting
- The city evolves and changes each time you come back (LBW, time of day, key event influencing the city's people)
- This is where most critical path missions are, and all of the side missions

Deus Ex : What is it ?

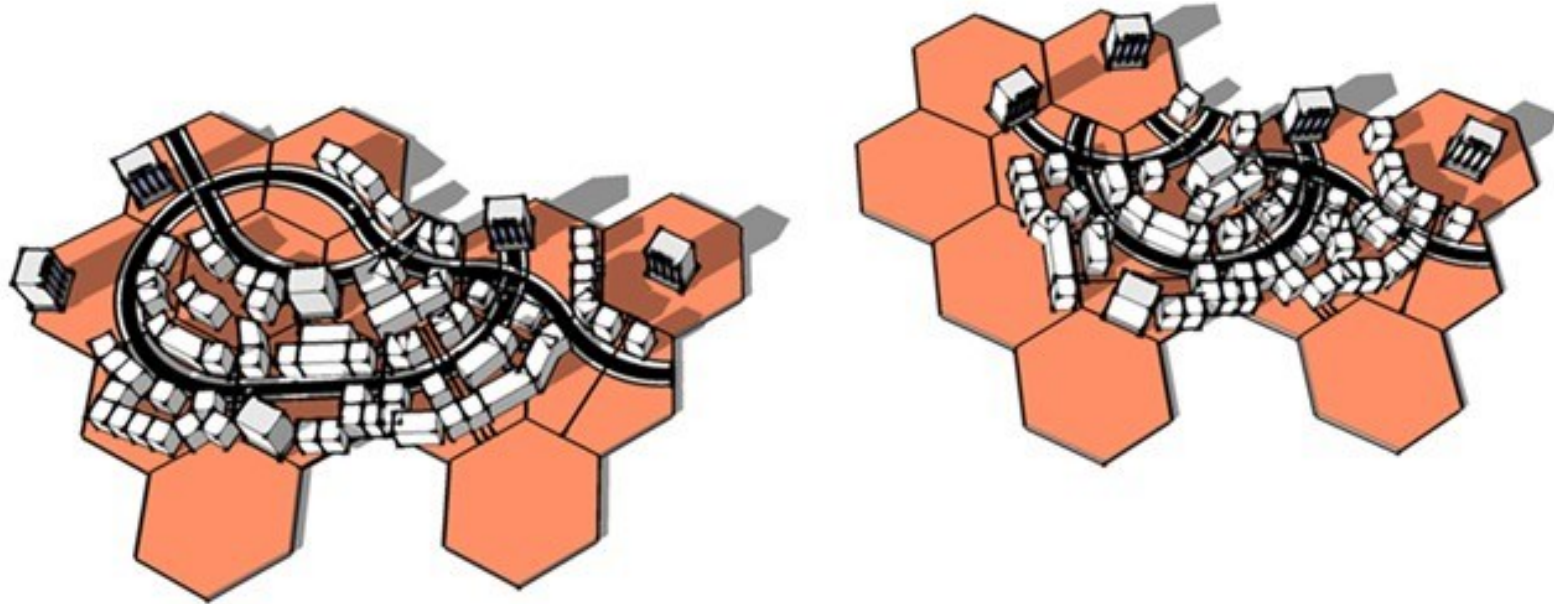
- Deus ex is about immersion, freedom of action and choice VS consequences.
- Anticipation with a cyberpunk feel : realistic, gritty, pretty serious.
- “Show don’t tell” principles drives most content creation, especially for narrative exploration

Pic of various gameplay situations corresponding to types of gamers

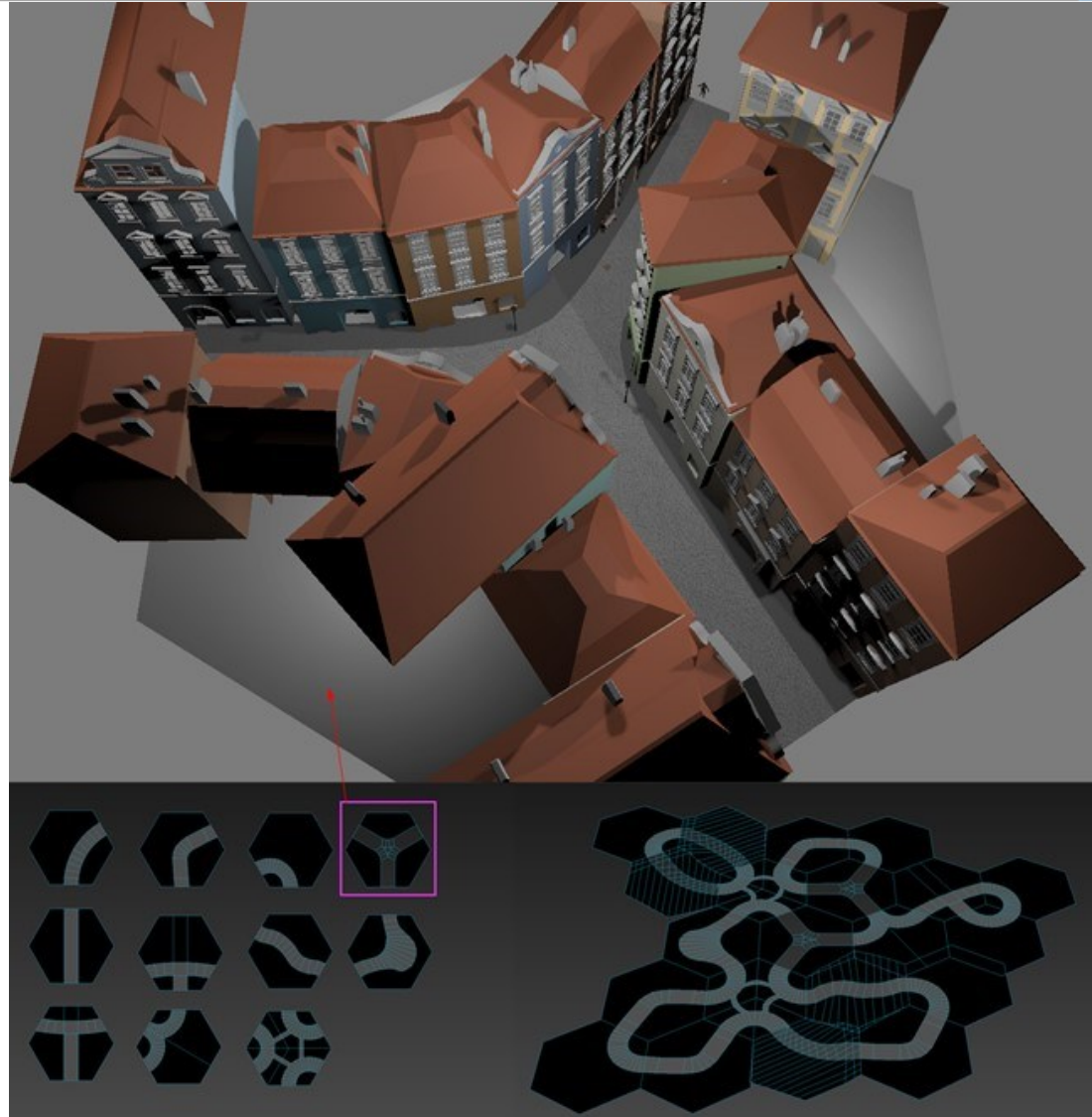
Prague: a quick word on macro design and global intentions

- A **looping** city with intricate small streets and numerous **landmarks** favoring frequent **reveals** and **vistas**.

→ Avoid visible map boundaries and dead ends
- Best practices from HR.



- Designed using **hexagonal** tiles

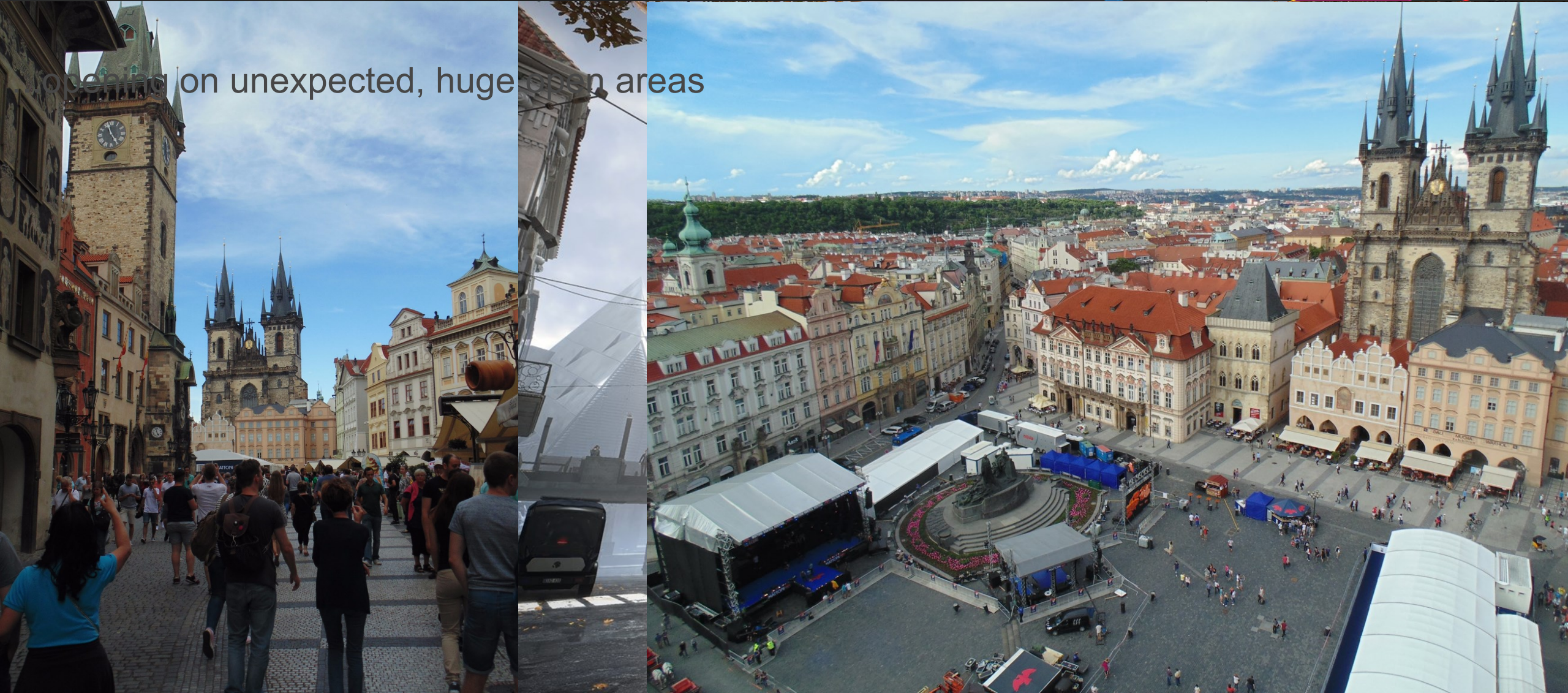


→ See Jf Meiffren and Sylvain Douce's talk for more details, insert name of talk here

Working from **photo references**, we got a feel of Prague's curvy, narrow streets....



opening on unexpected, huge open areas





Deus ex metrics nightmare : good navigation experience VS structural coherence VS budget

- Constraint : reuse as many existing assets from DX : HR as possible while building the city
 - ◆ Prague's organic feel and curviness clashed with Detroit's grid layout.
- HR's metrics simply did not fit for Prague's European style spiraling streets and tight, narrow navigation spaces.

Illustrate it with early pic showing the scale / metrics issue

The lingering DIY feeling

- Hardcore feeling of ownership and protection over Prague.
- Feeling of general mistrust
- Growing perspective deficiency
- The need to take everything into our own hands...

