GDC

A city of thousand choices: Prague city hub in Deus Ex Mankind Divided

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Sr. Level Designer, Eidos Montreal

WHO AM I?

DEUS EX
MANKIND DIVIDED™

DLC
DEUS EX
HUMAN REVOLUTION™
THE MISSING LINK

REMEMBER ME

I AM ALIVE

Prague, Czech Republic - D

I Spent Far Too Long Breaking Into Houses in Deus Ex: Mankind Divided

By Julian

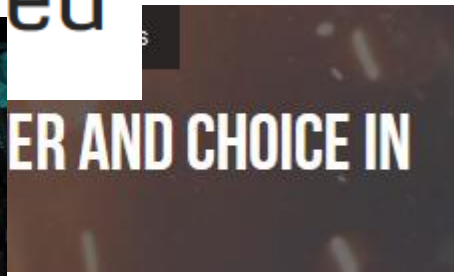
Deus Ex: Mankind D
hubs prove it's anyt

By
Robert Zak

A Closer Look At The *Mankind Divided*

Heather Alexandra
9/16/16 4:30pm · Filed to: DEUS EX: MANKIND DIVIDED

AGUE OF
DIVIDED



H THEFT IN
DED

TODAY'S TALK

- How we designed player choice in Prague
  - Through navigation & content
- All while being on a budget
- With WIP engine & tools

WHAT ARE PLAYER CHOICES?

- Players want to have it their way
- Deus Ex lets them play their way
  - By allowing different play styles
- How?
  - Multiple co-dependent game pillars

GAME PILLARS

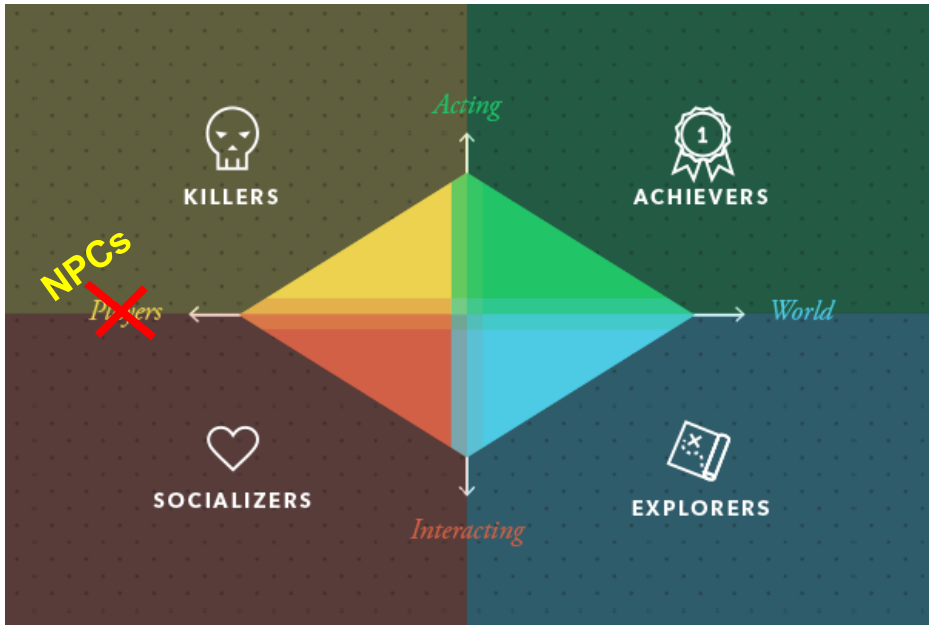
- Primary
  - Stealth
  - Combat
- Secondary
  - Hacking
  - Social
  - Exploration

Social
Hacking
Stealth
Combat

PLAYER ABILITIES

- Multiple tech trees
- Earn token on progress
- Unlock as you see fit

BARTLE'S TAXONOMY OF PLAYER TYPES



** Chart courtesy of Envato / Tutsplus.com & Julien "Kyatric" Fantoni*
http://bit.ly/2mg79wE

PLAYER TYPES TO GAME PILLARS

- Killer ► Combat & Stealth
- Socializer ► Conversations & Debates
- Explorer ► Side quests & Exploration
- Achiever ► Stress the systems

HOW WE DESIGNED AROUND TYPES?

- Identify key motives
- Extract design rules

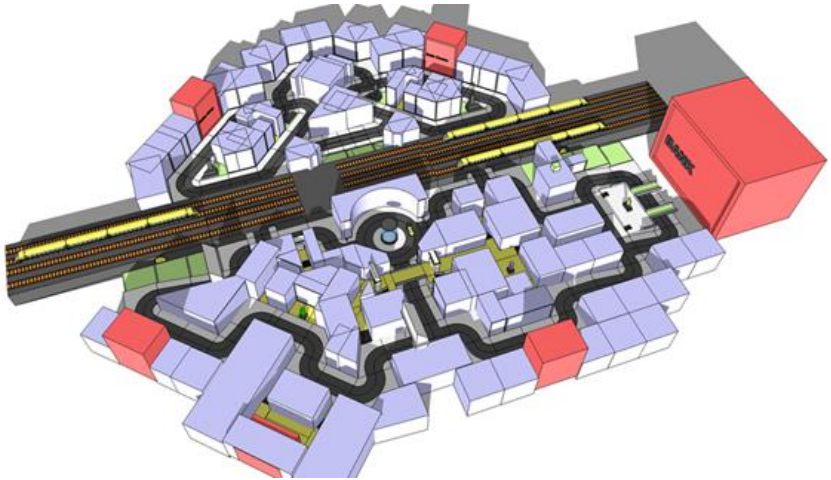
KILLER MOTIVES

- *"I want to kill my way to the top"*
  - We provide a fast lane of progression
  - We support key NPCs death

CONSEQUENT DESIGN RULE

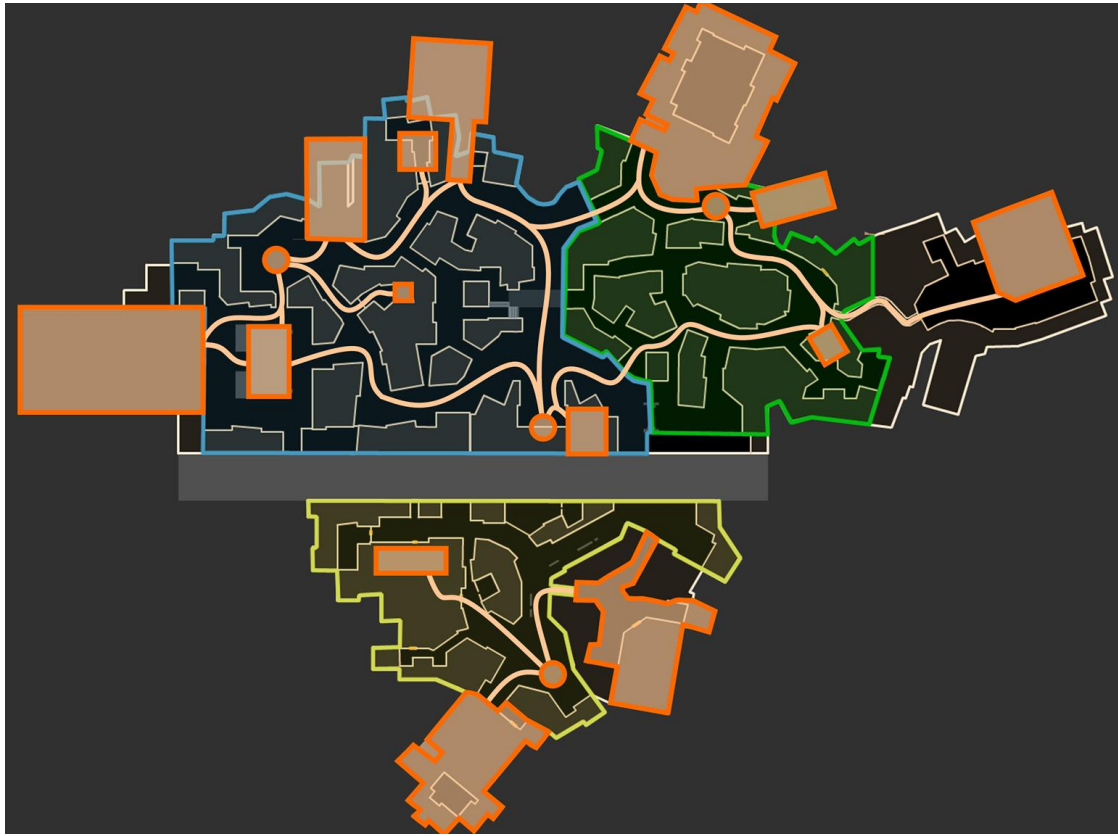
KILLERS

- The Killer drives the core navigation



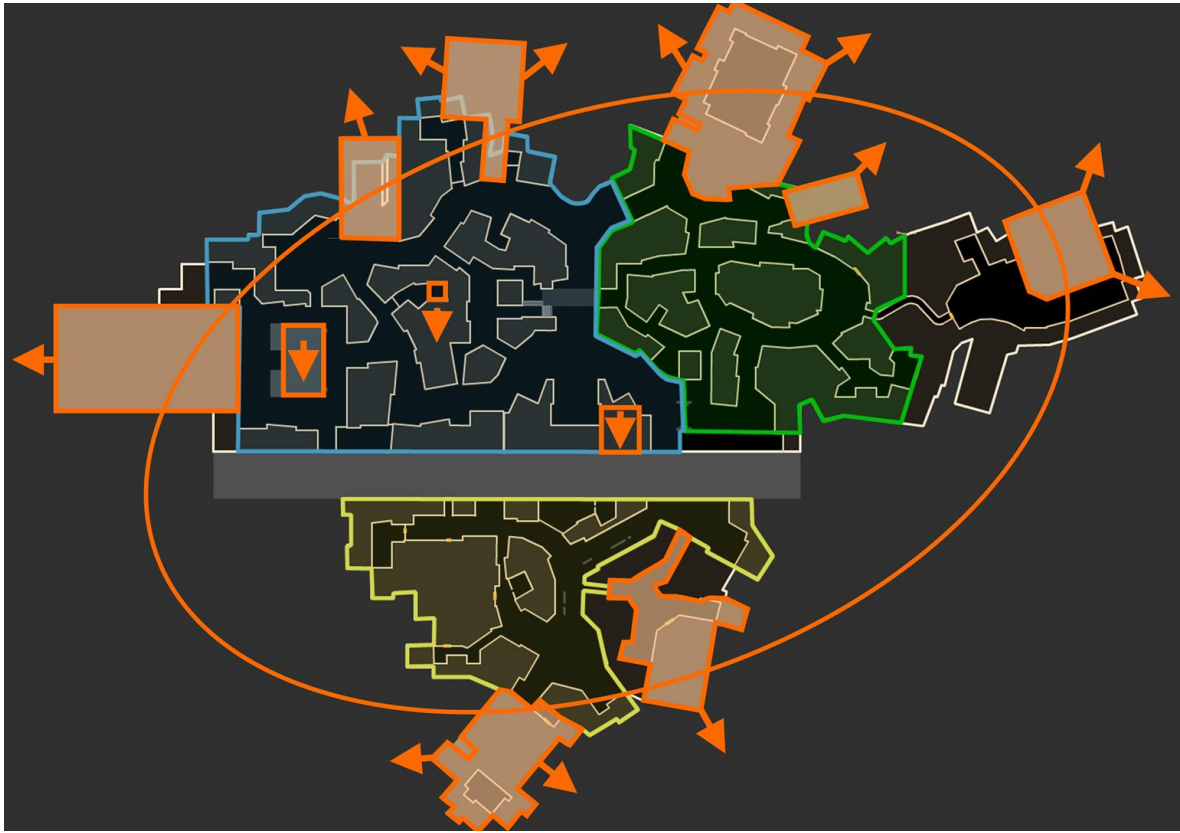
FAST LANE OF PROGRESSION

- All sub-locations at equal distance from each other
- Fast travel (Metro stations)



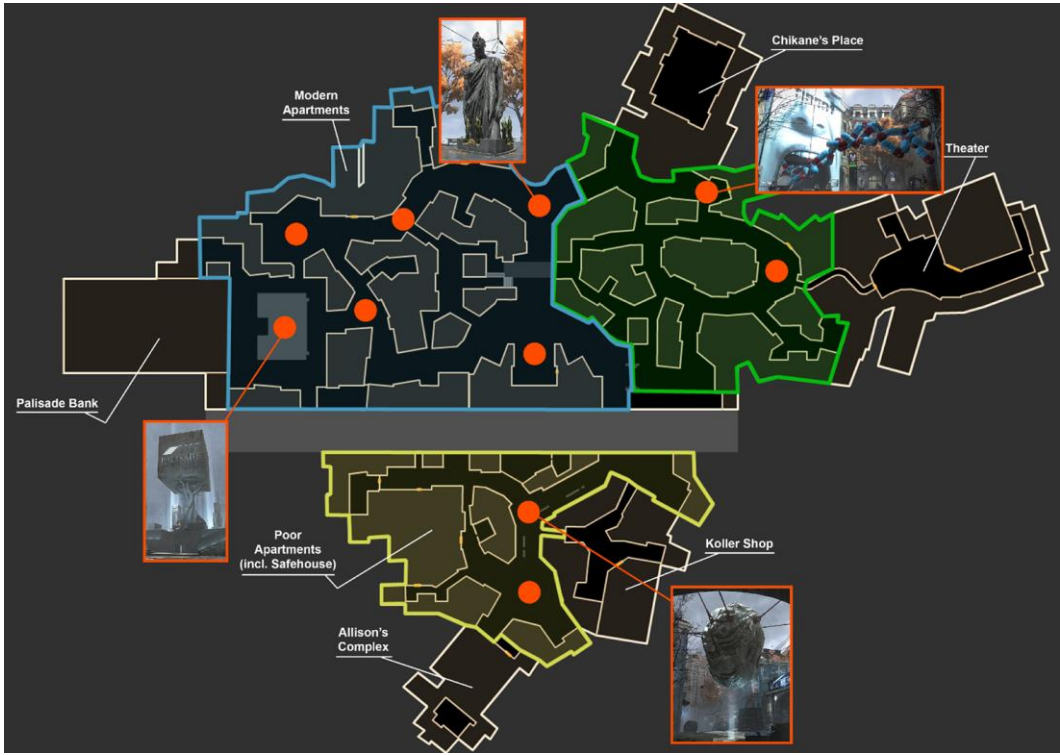
DESIGN OUTWARDS

- Easy to expand or shrink
- Works vertically
    - Sewers
    - Bank
    - TF29...



CLEAR PATH

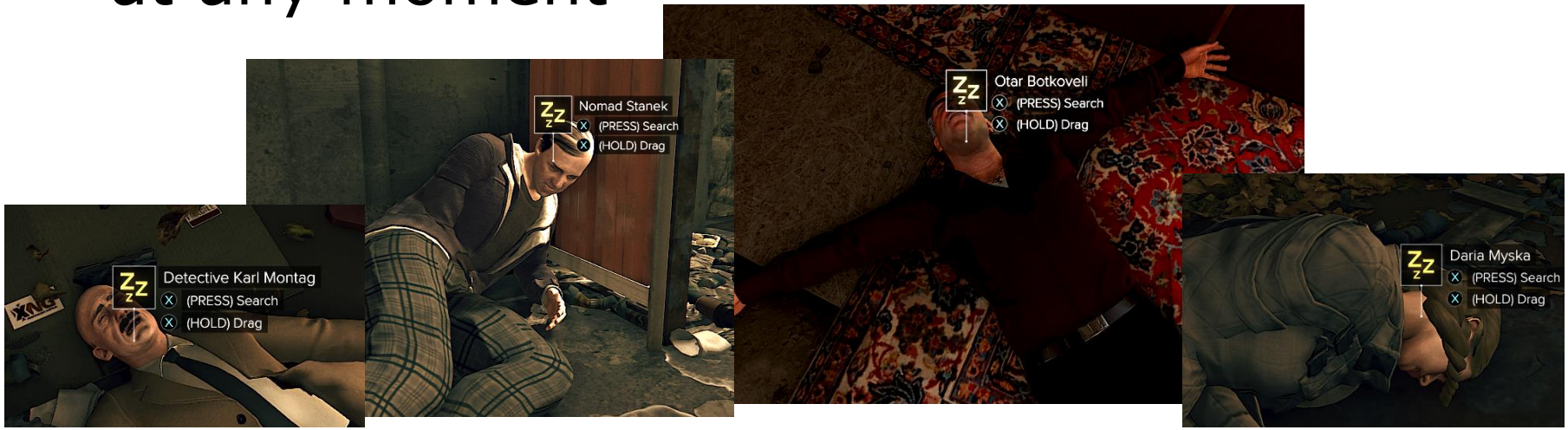
- Landmarks!
- Designed to wonder
- Located strategically



KEY NPCs CAN DIE

KILLERS

- Most of the quest givers can “disappear” at any moment



EXPLORER MOTIVES

- *"I want to see everything"*
  - We provide deep pockets of exploration
  - We support preemptive objectives

CONSEQUENT DESIGN RULE

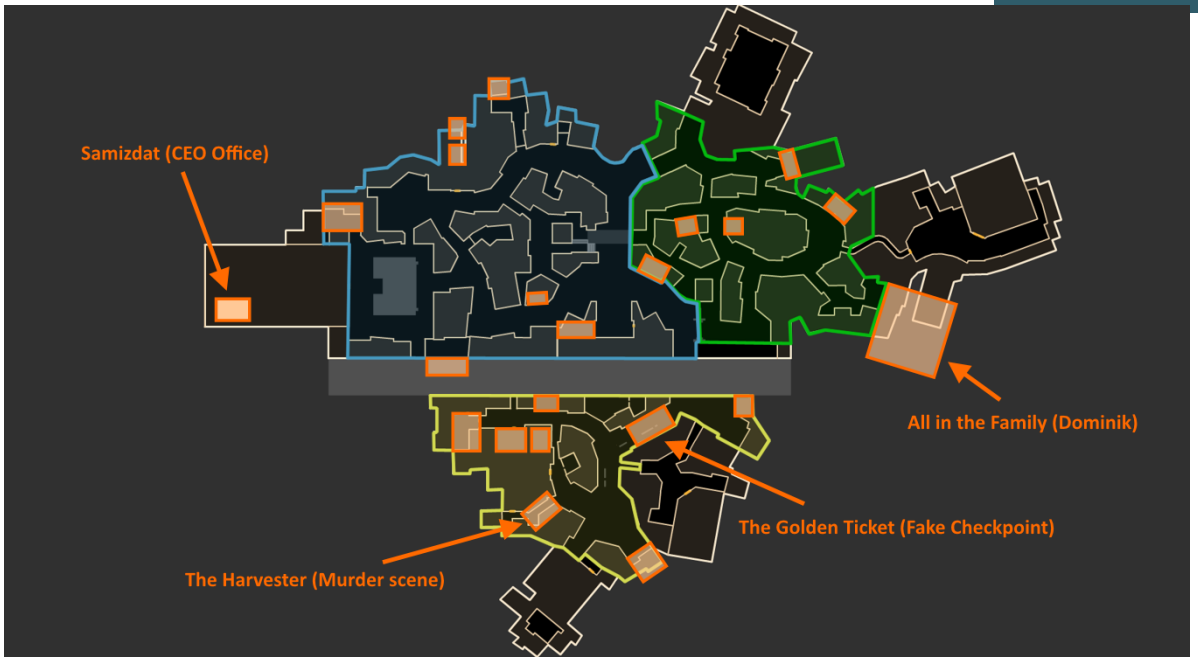
EXPLORERS

- The Explorer drives the side content

SIDE MISSIONS

EXPLORERS

- Non-overlapping locations
  - Outside crit path
  - Sewers ideal!
- Freed up space later for larger setups



3,3
m

POLICIE

EXPLORATION SETUPS

- Fills the world with compelling narrative
- Properly enticed or deliberately hidden

EXPLORATION SETUPS

EXPLORERS

- Apartments, garages, basements
  - Built from templates
    - Reusable
    - Parameterizable
    - Cheap!
  - Populates the world
  - Easy to iterate on

RAND
ON NEWSSTANDS
NOW!
INFLUENCES
AUGS
NO
MORE
H2O
BOOST
31
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Same footprint!
RAND
ON NEWSSTANDS
NOW!
INFLUENCES
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31
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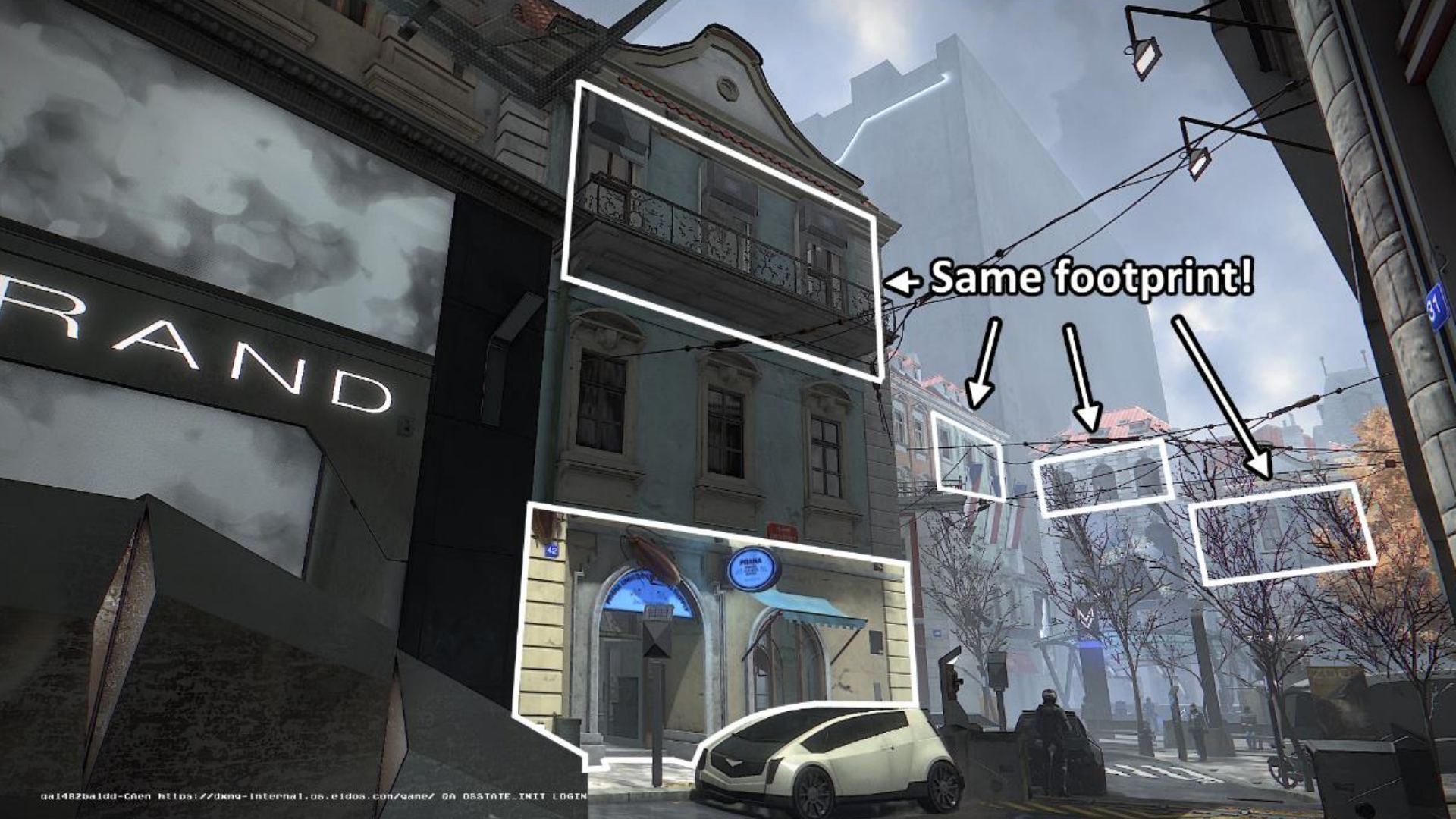
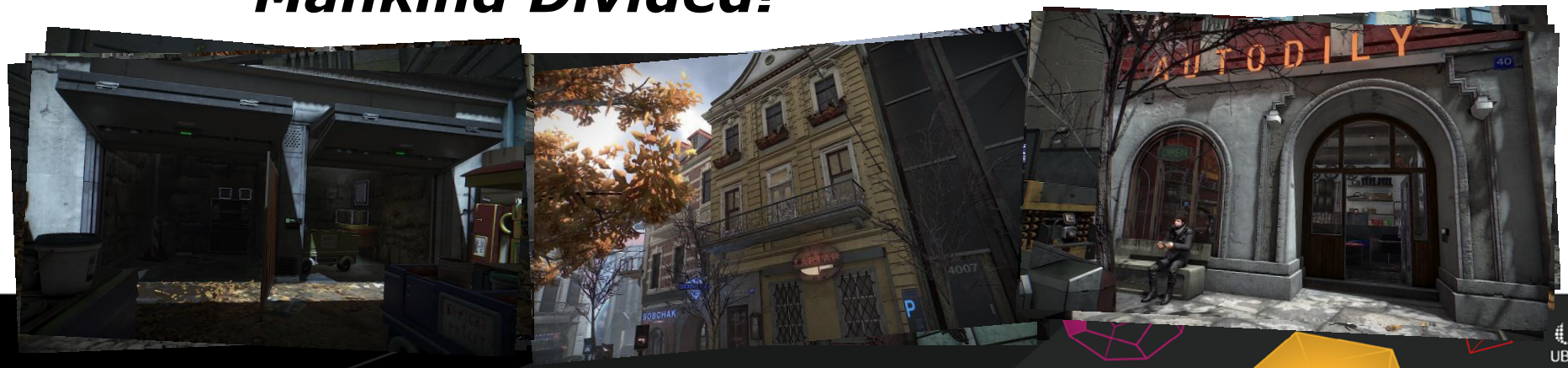
Same footprint!
RAND
ON NEWSSTANDS NOW!
INFLUENCES
MORE
H2O BOOST


Same footprint!

EXPLORATION SETUPS

EXPLORERS

- Apartments, garages, basements
  - *Watch Clémence's talk (GDC Vault) -* ***Rewarding exploration in Deus Ex Mankind Divided!***



PREEMPTIVE DISCOVERY

EXPLORERS

- 75% of the city-hub can be explored beforehand

PREEMPTIVE OBJECTIVE COMPLETION

SOCIALIZER MOTIVES

- *"I want to bond with NPCs"*
  - We provide deep conversations with high stakes
  - We provide merchants to trade with

CONSEQUENT DESIGN RULE

SOCIALIZERS

- The Socializer drives the LBW

**Living & Breathing World*

DEBATES

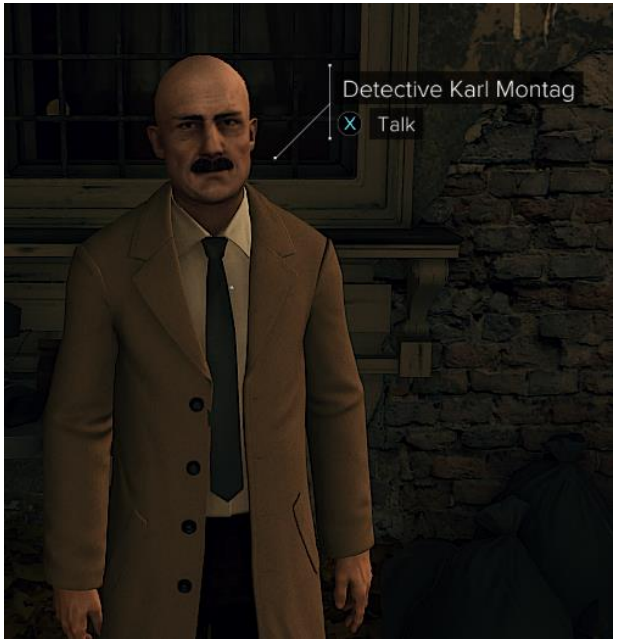
SOCIALIZERS

- Deeper, *life-at-stake* conversations
- Permanent outcomes

CONVERSATIONS & TRADE

SOCIALIZERS

- RPG Conversations
  - Quest givers
  - Merchants
    - Goods
    - Information



ACHIEVER MOTIVES

- *"I want to do what you can't"*
  - Reward creativity
  - Create desire to reach places no one else can

CONSEQUENT DESIGN RULE

ACHIEVERS

- The Achiever adds the flavor

REWARD CREATIVITY

ACHIEVERS

DESIGN 'UNREACHABLE' PLACES

How do you cater for player choices in a city hub?

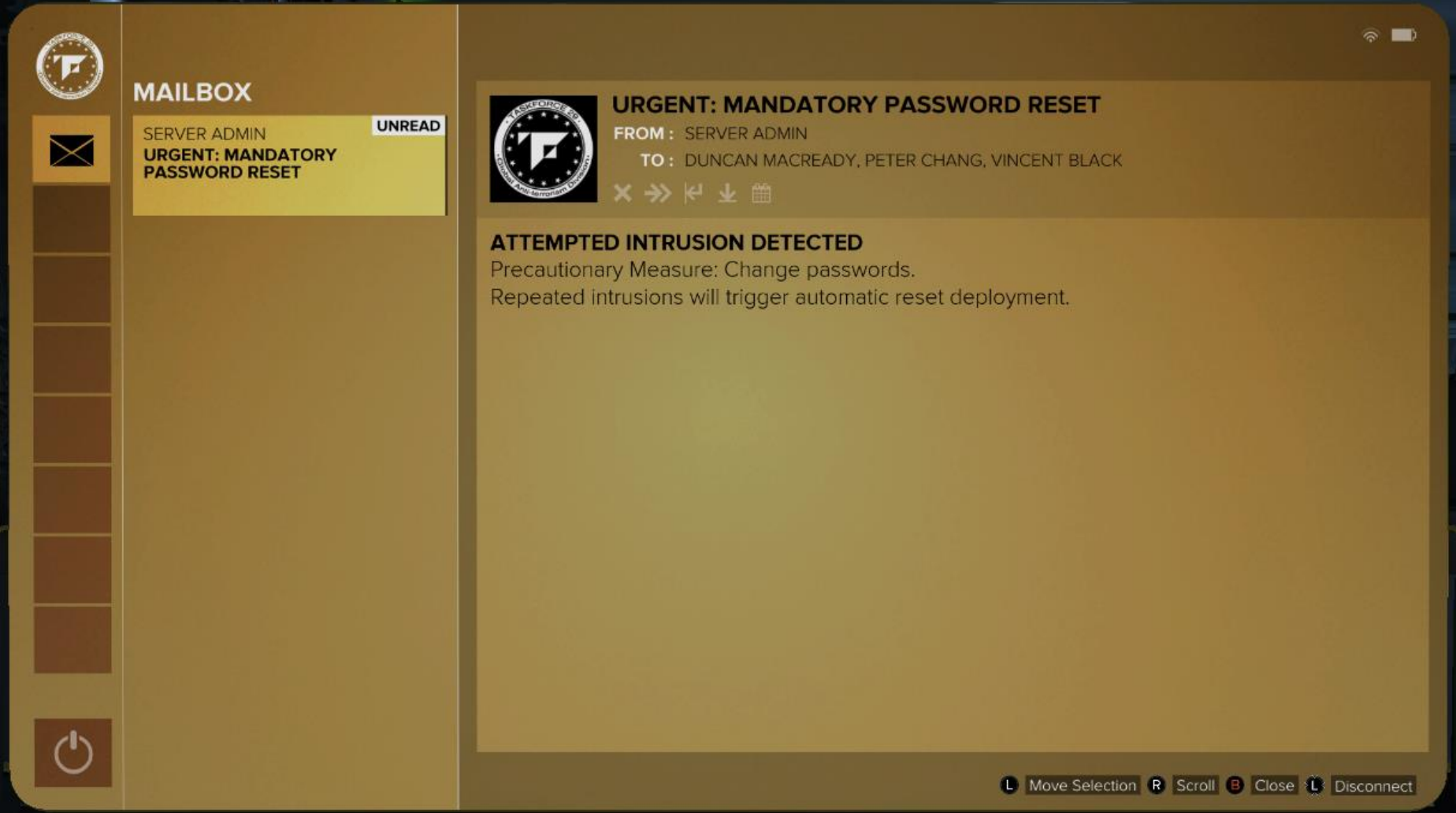
CHOICES ARE ALL ABOUT FEEDBACK

- Branching without acknowledging is cheap but useless

- Finding our vectors for feedback
  - Main missions
  - Side quests
  - Independent content

ACKNOWLEDGING CHOICES

- e-mails & newspapers


MAILBOX
SERVER ADMIN
UNREAD
URGENT: MANDATORY PASSWORD RESET
URGENT: MANDATORY PASSWORD RESET
FROM : SERVER ADMIN
TO : DUNCAN MACREADY, PETER CHANG, VINCENT BLACK
ATTEMPTED INTRUSION DETECTED
Precautionary Measure: Change passwords.
Repeated intrusions will trigger automatic reset deployment.
L Move Selection
R Scroll
B Close
L Disconnect

PICUS DAILY STANDARD

FORENSIC TEAM ATTACKED IN RUZICKA STATION

PRAGUE
TOP STORY

Terror struck the bombed-out shell of Ruzicka train station a second time today when an unidentified augmented assailant broke through police cordons and savagely attacked forensic investigators. State Police have yet to reveal how many of their teammates were injured or evidence related to the bombing," said police spokesman Alexej Volner.

The killer's whereabouts remain unknown at this time. He is believed to have escaped via subway tunnels leading to downtown, most likely by using his augments. State Police are

PICUS DAILY STANDARD

AUGMENTED REPORTER FOUND MURDERED

PRAGUE
EDITORIAL

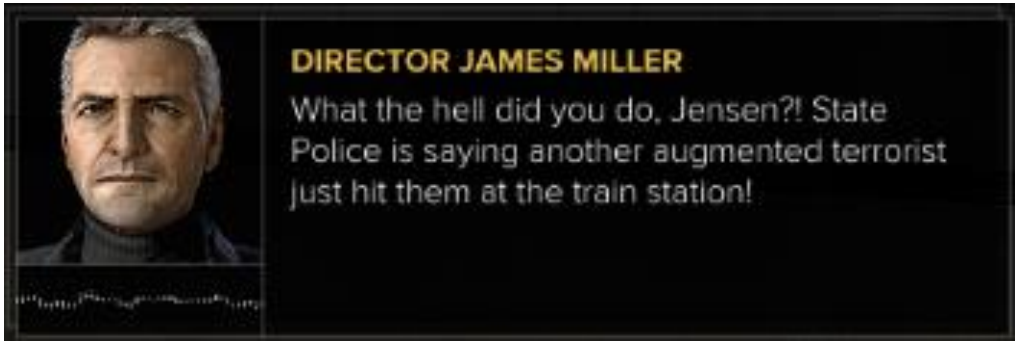
State Police are investigating a grisly murder in Prague's Překážka District tonight. Local augmented reporter Angela Gunn, best known for a number of well-received political exposés, was found dismembered in an alley.

Citizens are reminded to be vigilant and remain in secure, well-lit areas at night.

R Scroll B Back

ACKNOWLEDGING CHOICES

- Briefers



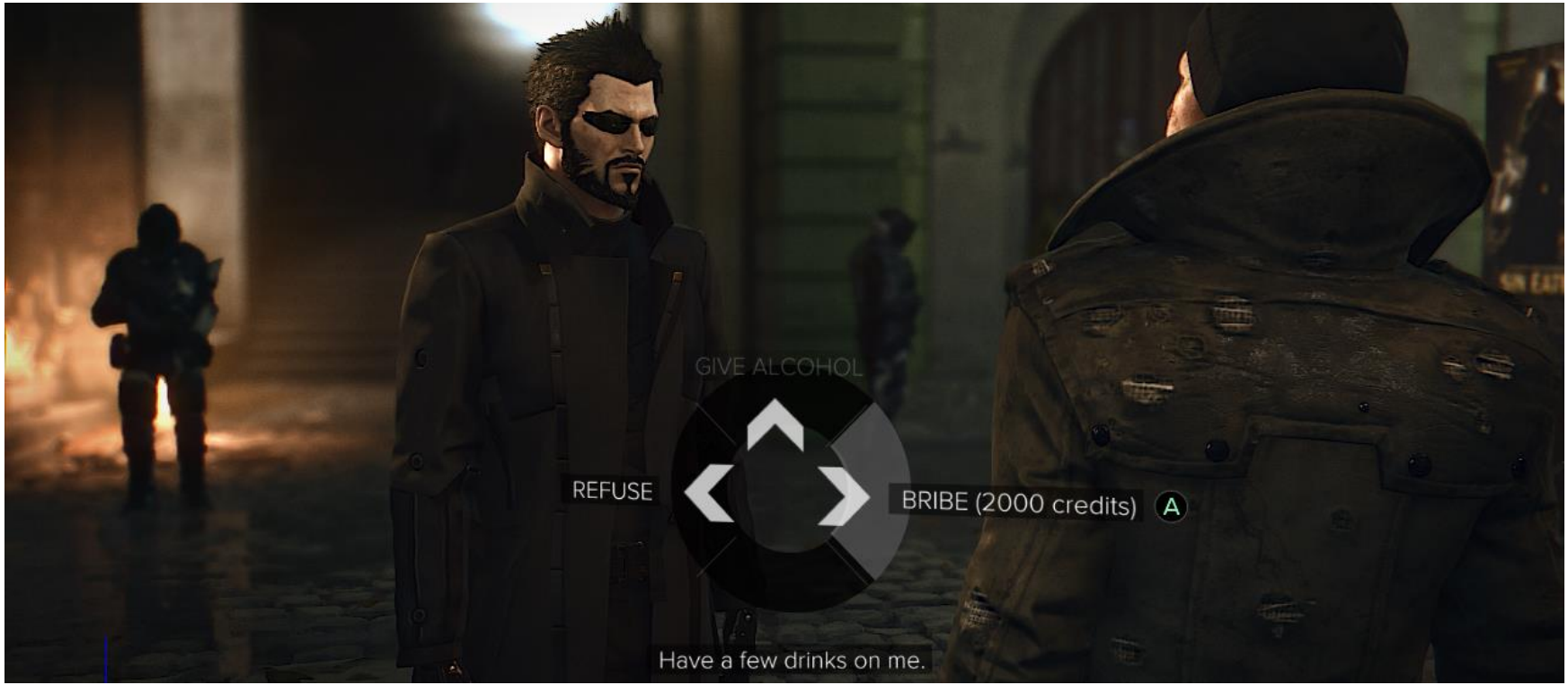
ACKNOWLEDGING CHOICES

- Overheard conversations

Skipped Allison

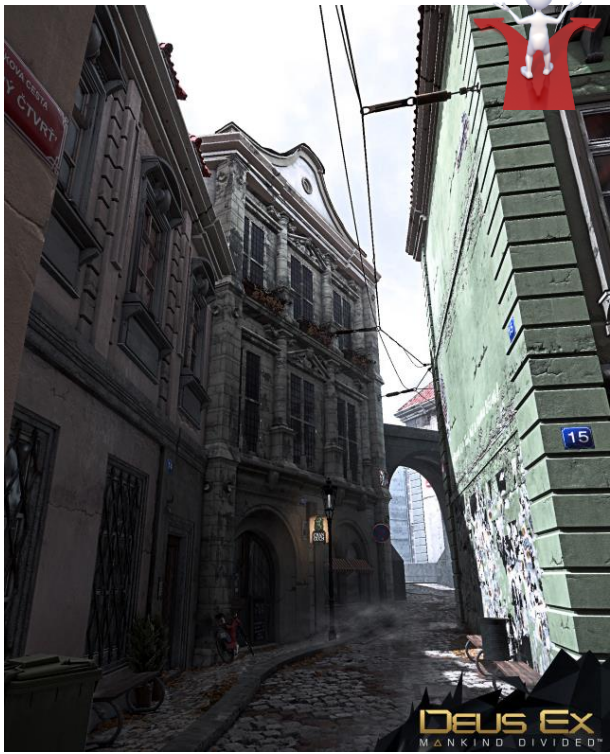
ACKNOWLEDGING CHOICES

- Conversations


GIVE ALCOHOL
REFUSE
BRIBE (2000 credits) A
Have a few drinks on me.

ACKNOWLEDGING CHOICES

- City hub
  - Various ways to customize



BUILDING CONSEQUENCES

- Critical path changes
  - 3 Visits (day/night/curfew)
  - Really expensive

BUILDING CONSEQUENCES

- Side Quest changes
  - Samizdat (propaganda wall, facade)

BUILDING CONSEQUENCES

- Expensive optional set-up
  - **The Calibrator** side quest
    - Conversation (with Koller)
    - Debate (with Otar)
    - Conversation (with Gallois in Golem City)
    - *Full new side quest!*
    - Player rewarded only in visit 2 and 3!
    - *(also: Koller's shop may burn)*

BUILDING CONSEQUENCES

- Independent setups changes
  - Fewer resources left...
  - ...lots of contents to implement
    - Bank, Shops, TF29, …
  - Time to get smart!

BUILDING CONSEQUENCES

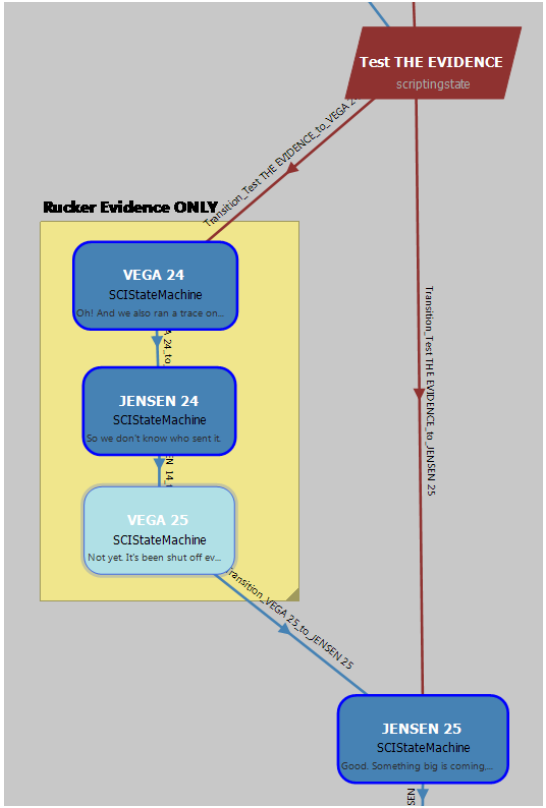
- Branching
  - Classic & Familiar
  - Extensively used in DXHR
  - Quickly expensive
    - story changes
    - large dependencies

BEYOND BRANCHING

- We want scalability
  - Esp. for side quests such as **Samizdat** or **The Harvester**
- But not at the expense of something else
  - Full time designer & writer on each
  - New approach required

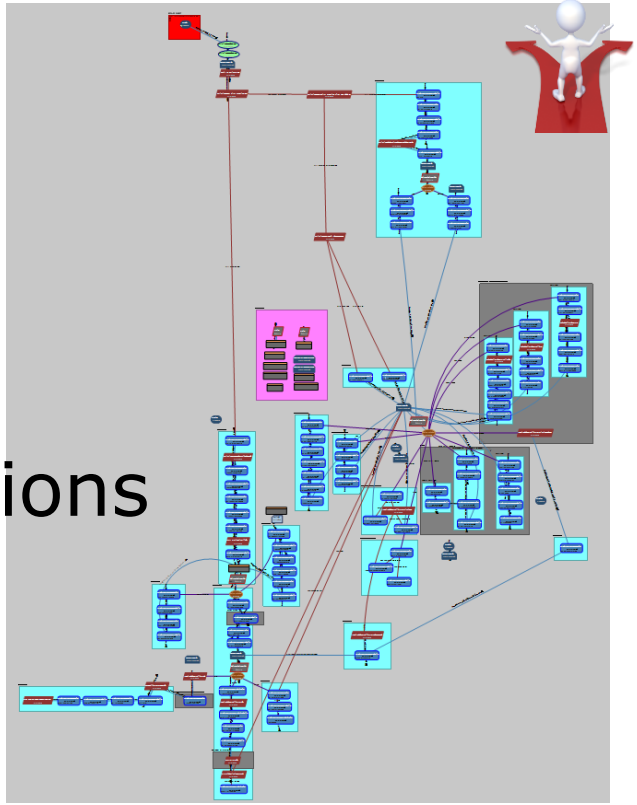
BRACKET TECHNIQUE

- Branch out
- Merge back
- Cheap-o-meter: 5/10



APPLYING TECHNIQUE

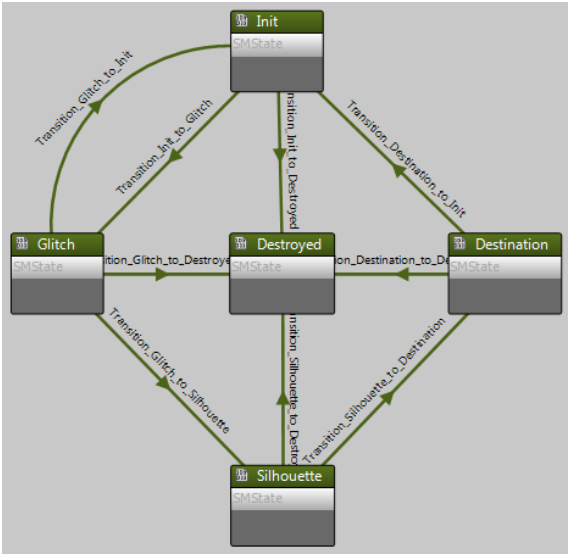
- Works well with briefers
  - Simple
  - Maintainable
- Not so much with conversations
  - Too much branching already
- Cheap-o-meter: -2/10



What if, instead of thinking in terms of **outcomes**, we thought in terms of **states**?

STATES?

- Standalone (coexistence)
- Scalable (transitions)
- Match exactly player actions
- Controlled costs
  - Cheap-o-meter: 8/10!



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SHOPS

Hemingway's Fine Spirits

THE BOX

SOBCHAK
SECURITY

TUBEHOUSE
ELECTRONICS

TECH INDIA

MAG

STATES

- Use templates as a canvas
- Establish our states in regard with story
  - Vectors can be e-mails, NPCs, etc
- Design transition conditions
- Make sure they don’t overlap
  - Especially when we alter the world
  - (i.e. propsing)

BANK

BANK

BANK

PALISADE
LEVEL 3
3
ONLY
ASHANI TALHAR CEO
MASAAKI OSHIRO CTO
IT SERVICES

POLICE
2AF 011

TASKFORCE 29
Global Anti-Terrorism Division
W
N
COMBAT RIFLE
30
0
FRAG
1
L1

IT SUPPORT
5
WATCH YOUR STEP
W
N
COMBAT RIFLE
30
0
FRAG
1
L1

COMBINATIONS ARE INFINITE!

- All states coexist happily together
- Each player gets its own tailored experience
  - Depending on how deep each interacted with the world

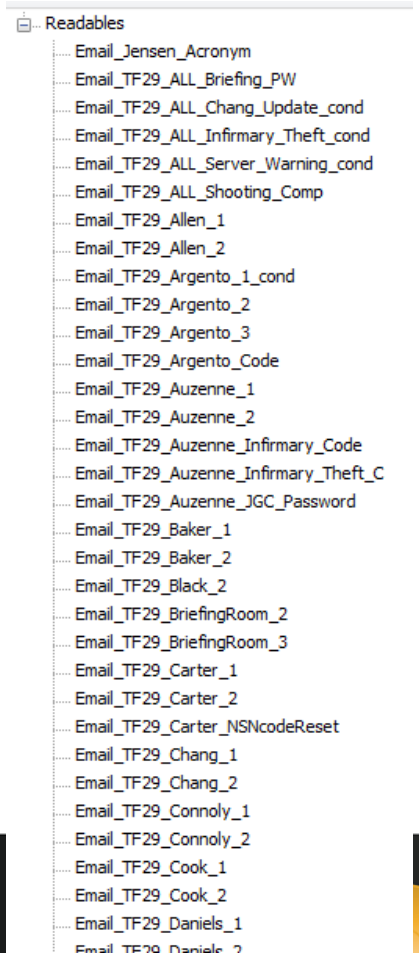
IT'S A MATTER OF RESOURCES

- And how you manage the balance
  - Spend it more where most people will see
    - Reserve large scale consequences for the critical path
  - Be smart elsewhere
    - Use cheap tricks for the 1%

(Psst! You can break the rules if you understand them first)

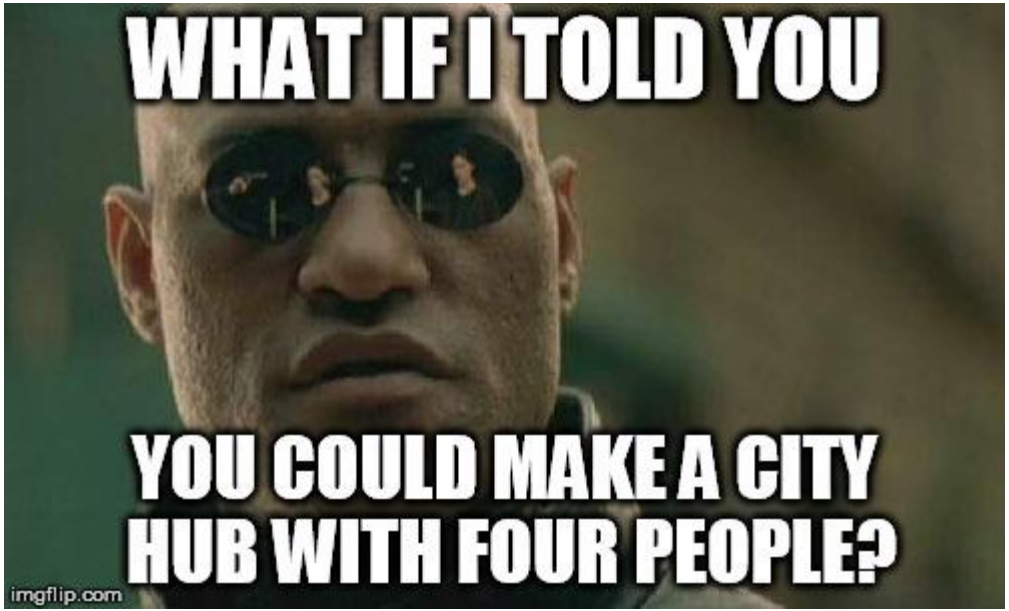
VERBOSITY

- Tons of readables
  - 600+ e-mails
  - 250+ pocket secretaries
  - 250+ conversations
  - 50+ newspapers
- No tools to track them
  - track manually :(



GETTING QA UP TO SPEED

- QA **needs** to know!
  - Or else you're wasting their time!
  - Undocumented stuff gets lost!
- Document every choice & consequence
  - In an easy-to-update way


WHAT IF I TOLD YOU
YOU COULD MAKE A CITY HUB WITH FOUR PEOPLE?
imgflip.com

THIS IS FINE.

FIRE IN THE KITCHEN!

Engine challenged in handling large worlds

+

Work-in-progress features

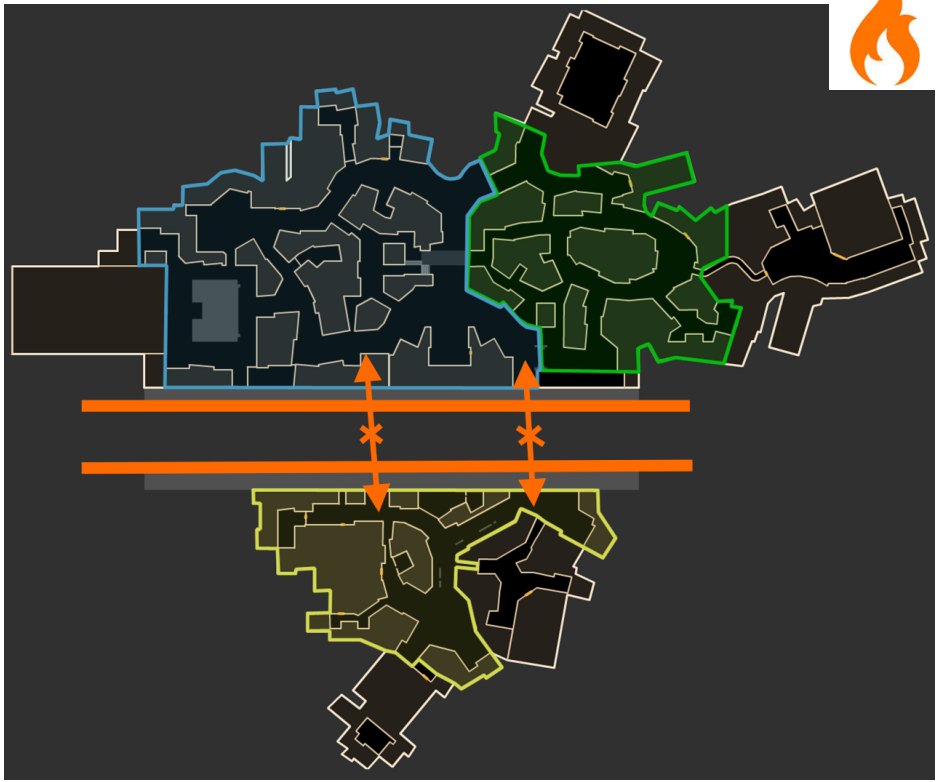
= Hit on stability & performance

STABILITY WOES

- Too many things for QA to test
  - Frequent builds or stable builds?
- Morale got hit
- **We shipped as is**
  - *using a mental database of careful workarounds™*

PRAGUE SPLIT

- Collateral
- Ate too much RAM
- Thank god fast travel!



ENFORCE HEAVY PROCESSES

- Or else we simply would not ship
  - or in a very ugly state
  - ...tell us about it :)
- Mandatory JIRA tracking
  - 100+ issues per human
  - Necessary evil

HERE COMES THE CAVALRY

- All aboard!
  - Narrative
  - Animation
  - AI
  - Side Missions
  - Performance

- Over specialization
  - cover, mini-map, patrols, gestures...

CUT CUT CUT

- *"They won't know wha*
- Cutting is safer than
- Cutting is also faster than fix
  - e.g. Airborne reinforcements
    - Broke 2 weeks before sub :(
      - *(back in A Criminal Past DLC, out now!)*

IT SHIPPED

CONCLUSION & TAKEAWAYS

- Identify your players and what they do
- Design your city hub around them
- Acknowledge choices made
- Be smart with branching
- Ultimately it’s always a question of how and where you invest

More Deus Ex talks!

- **Rewarding Exploration -** Clémence Maurer (Vault)
- **Storytelling -** Rayna Anderson (Vault)
- **Deus Ex Breach -** Fleur Marty (3/2 @10am)
- **Deus Ex 1 Post-Mortem -** Warren Spector (3/2 @4pm)

We're hiring!
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