



# Adventures in Text

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Creative Director, inkle

GAME DEVELOPERS CONFERENCE®

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*Frankenstein,*  
Dave Morris



*Down Among the Dead Men,*  
Dave Morris



*Sorcery,*  
Steve Jackson



*Cainsville Files,*  
Kelley Armstrong



*Sorcery 2,*  
Steve Jackson



*80 Days,*  
Meg Jayanth

**inkle**



# Text is...

- Accessible
- Versatile
- Easy to scale
- Characterful



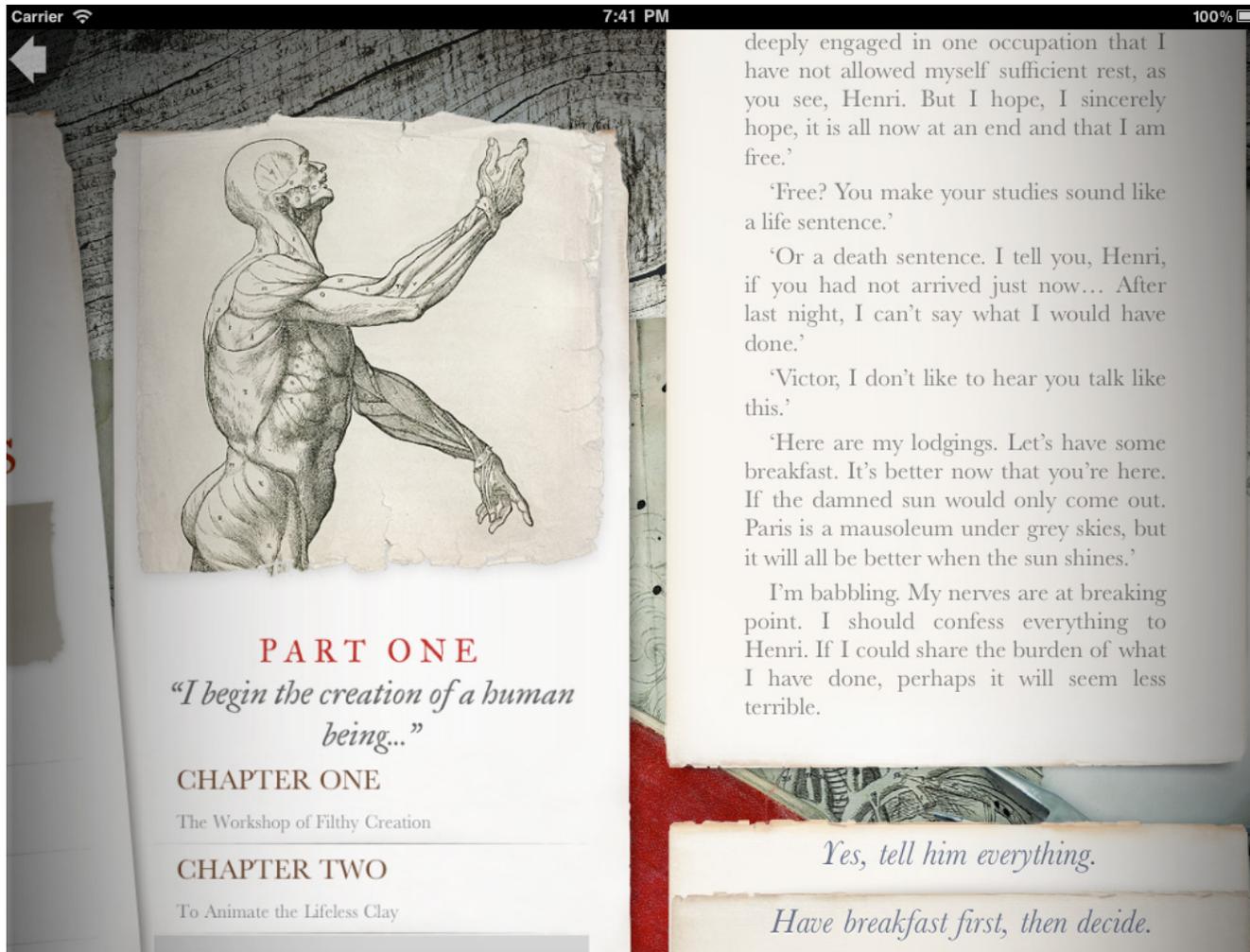
*"Reverse primary thrust, Marvin, that's what they say to me.", "Open airlock number three, Marvin.", "Marvin, can you pick up that piece of paper?" Here I am, brain the size of a planet, and they ask me if I can pick up a piece of paper.*

*Of course, I'm quite used to being humiliated. I can even go and stick my head in a bucket of water if you'd like. I mean, if that's what you really want.*

*Would you like me to stick my head in a bucket of water? I've got one ready. Hold on a minute."*



*-The Hitch-hiker's Guide to the Galaxy,  
Douglas Adams*



*Frankenstein*, Dave Morris (2012)

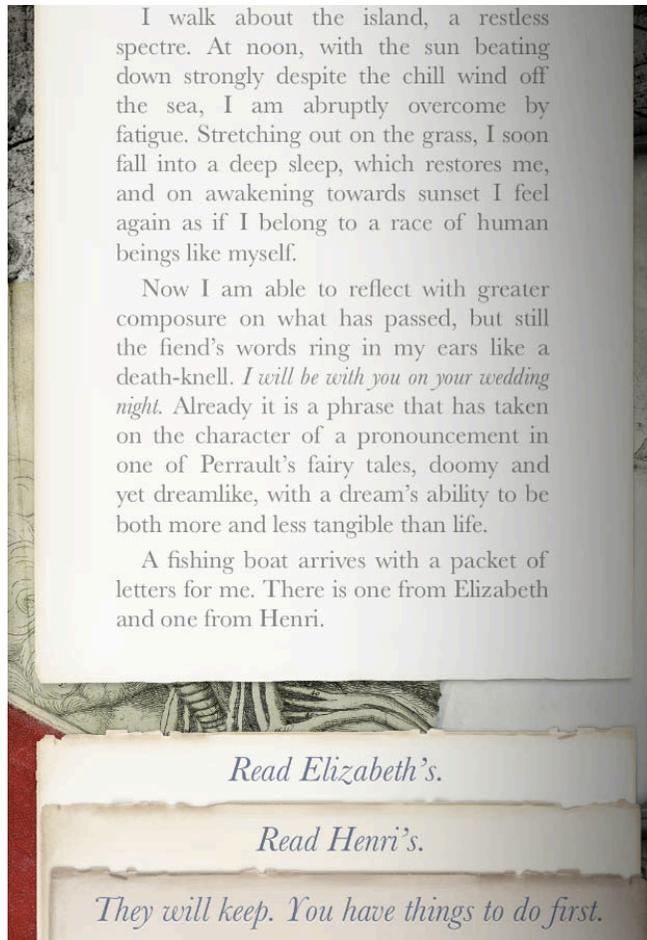


# ...none of you read it

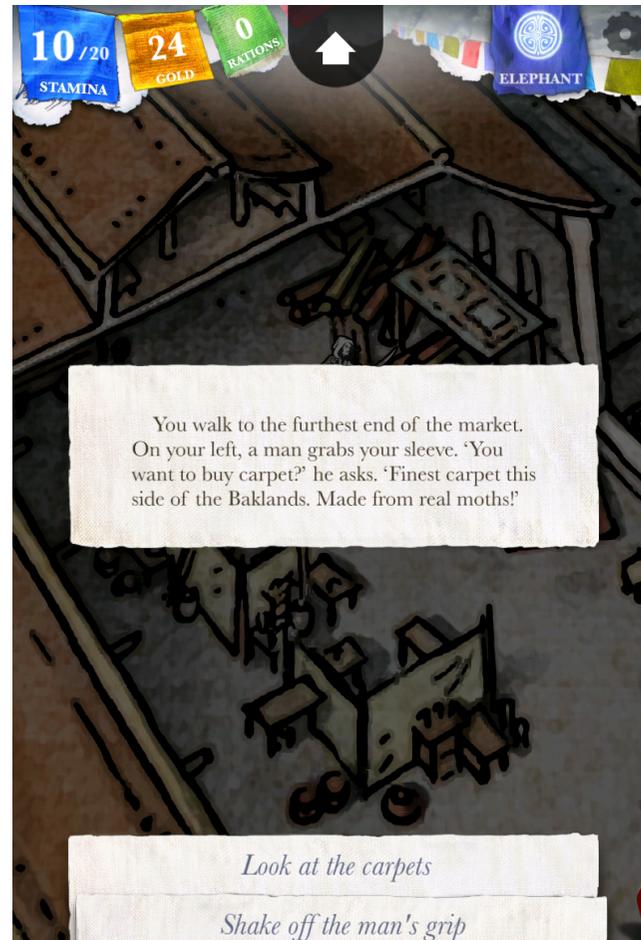
- More text  $\Rightarrow$  less reading
- Luckily, though, everyone reads choices



# Choices



*Frankenstein*



*Sorcery!*

**Choices  
provide  
pacing**



Front of House, lying down

Score: 10

Moves: 43

>get up

The bulldozer driver gives a quick chew of his gum and slams in the clutch. The bulldozer piles into the side of your home.

Your home collapses in a cloud of dust, and a stray flying brick hits you squarely on the back of the head. You try to think of some suitable last words, but what with the confusion of the moment and the spinning of your head, you are unable to compose anything pithy and expire in silence.

>s

You keep out of this, you're dead. An ambulance arrives.

>don't panic

You keep out of this, you're dead and should be concentrating on developing a good firm rigor mortis. You are put in the ambulance, which drives away.

>pray

For a dead person you are talking too much. As the ambulance reaches the mortuary a fleet of Vogon Constructor ships unexpectedly arrives and demolishes the Earth to make way for a new hyperspace bypass.

We are about to give you your score. Put on your peril-sensitive sunglasses now. (Hit RETURN or ENTER when ready.) >\_

*The Hitch-  
Hiker's Guide to  
the Galaxy,*  
Douglas Adams  
and Steve  
Meretzky



You follow a group of youngsters with packs up the road. Homes — hovels — line the track and strange faces appear at the windows, watching you as you pass. Then from around the bend ahead, a troop of guards appears!

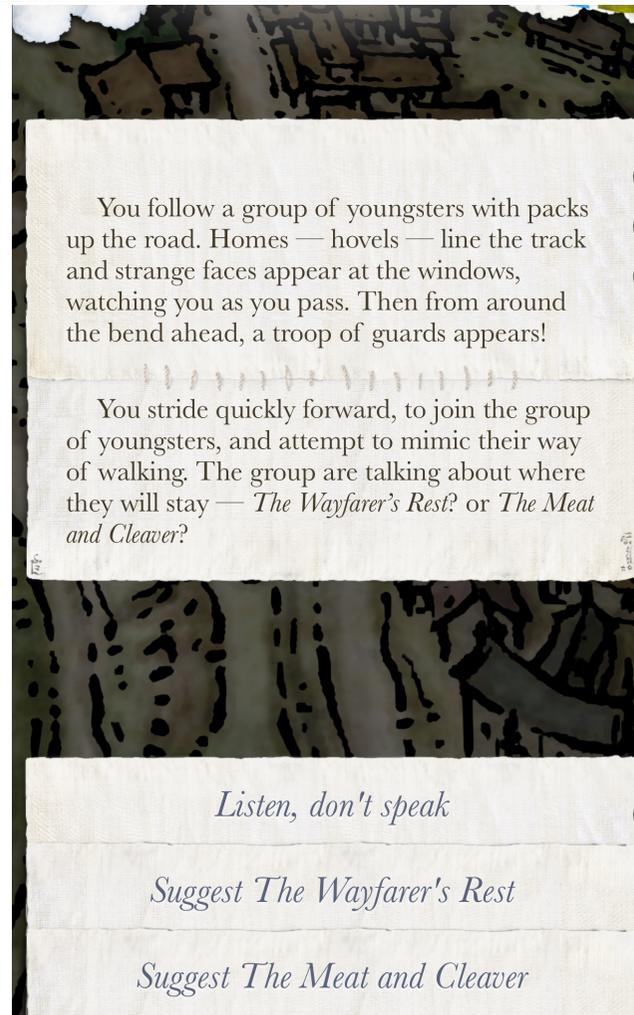
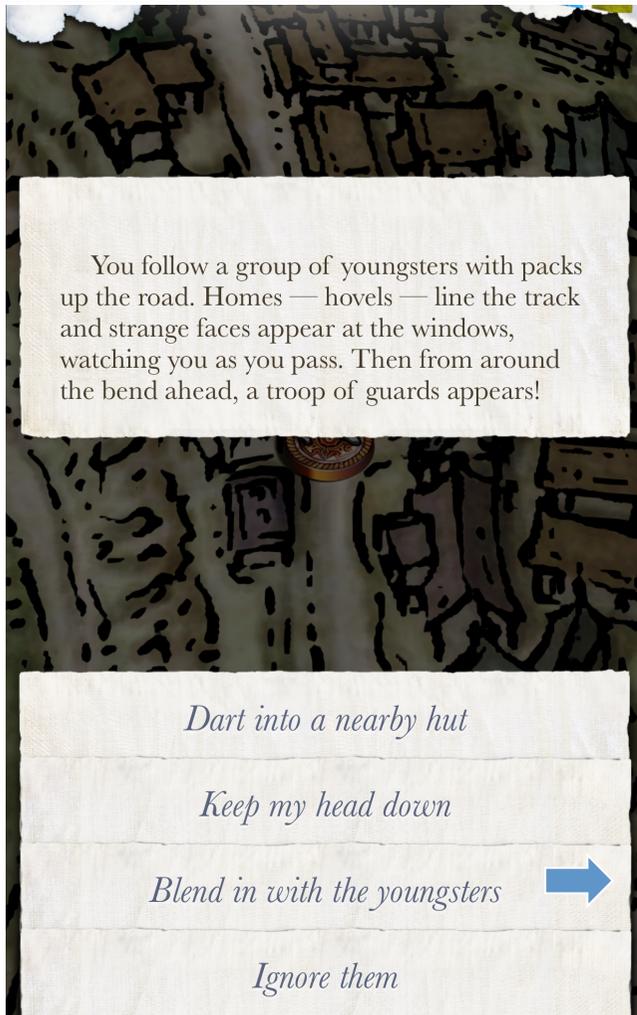
*Dart into a nearby hut*

*Keep my head down*

*Blend in with the youngsters*

*Ignore them*

**Choices  
can  
escalate**



**Choices  
can  
escalate**



You follow a group of youngsters with packs up the road. Homes — hovels — line the track and strange faces appear at the windows, watching you as you pass. Then from around the bend ahead, a troop of guards appears!

*Dart into a nearby hut*

*Keep my head down*

*Blend in with the youngsters* →

*Ignore them*

You follow a group of youngsters with packs up the road. Homes — hovels — line the track and strange faces appear at the windows, watching you as you pass. Then from around the bend ahead, a troop of guards appears!

You stride quickly forward, to join the group of youngsters, and attempt to mimic their way of walking. The group are talking about where they will stay — *The Wayfarer's Rest?* or *The Meat and Cleaver?*

*Listen, don't speak*

*Suggest The Wayfarer's Rest* →

*Suggest The Meat and Cleaver*

You follow a group of youngsters with packs up the road. Homes — hovels — line the track and strange faces appear at the windows, watching you as you pass. Then from around the bend ahead, a troop of guards appears!

You stride quickly forward, to join the group of youngsters, and attempt to mimic their way of walking. The group are talking about where they will stay — *The Wayfarer's Rest?* or *The Meat and Cleaver?*

*'The Wayfarer's Rest is a much more comfortable place,' you begin.*

The youngsters stop almost instantly, and turn with a look of surprise. 'Who are you?' one demands, at the top of his squeaky little voice. 'Where did you come from?'

He has attracted the patrol's attention.

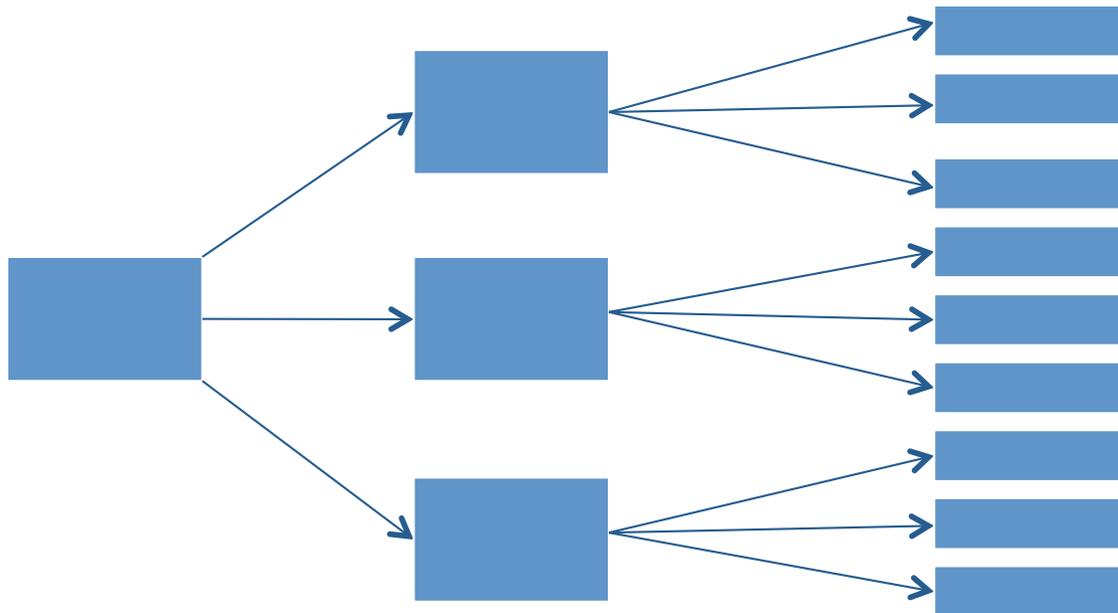
'Oi, you!' One the guards grabs you by the arm. 'You look new here. Are you new?'

*'Yes.'*

*'No.'* →



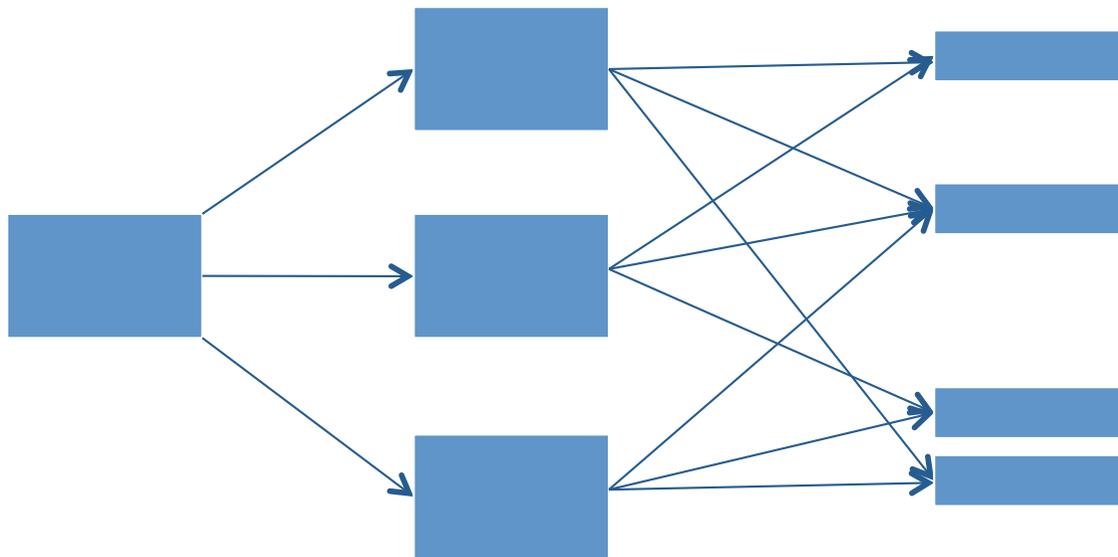
## Escalating choices provide agency



Player's  
view



# Escalating choices provide **sufficient** agency



Author's  
view



# Scale

- Sorcery!
  - 3,442 sections
  - 2,618 choices
- Sorcery! 2
  - 11,523 sections
  - 8,969 choices



# Authoring format



```
|A_2
>>> setSlideshowImage: image=chapter2_impressive-building.png
[To Animate the Lifeless Clay]
An impressive building, isn't it? It used to be a gymnasium and tennis court. Aristocratic young men would learn to strike elegant poses with a racquet while
never seeming to do anything so vulgar as trying to win. They also practised skewering each other with swords. Quite often the blossoms would come off the
foil, and then they'd be brought in for us to operate on. I'm quite serious. I got the liver and kidneys of my creature from one aristocrat whose
opponent's blade drove a little too deep.
Since the revolution the building has stood empty, apart from occasional use as an assembly hall. Well, not quite empty. You'll see. Ah, I can hear the night
watchman coming. Where's my purse?
'Good evening, citizen. I found this bag of coins in the street and thought it might belong to you.'
'Bless you, citizen. I was wondering where I'd dropped that. Perhaps you'd like to come inside.'
* What are we here for? -> Why_collect_heads
* Lead the way. -> Pile_of_heads

Why_collect_heads
I need the small cartilages of a human voice box - a very intricate structure, much too time-consuming for me to build by hand. If I can find one fresh
enough, chemicals can be used to stimulate its growth to suit the creature's scale. Or perhaps I'll use it to make moulds in which I can nurture bone
cultures. There are a thousand excruciating details like this{Pale_cheek: - little wonder you think my nerves are shot}.
* Why would you look for such a thing here? -> Pile_of_heads

Pile_of_heads
{Why_collect_heads:Come and see. }That sweaty stink - doesn't that bring back memories of school, eh? In the salons men hide their animal excretions with
scent and powder, but venture into zoo or gymnasium alike and you can't avoid the sharp odours of unadorned nature. And there's another odour here - can
you smell it, that butcher's shop stink? {Why_collect_heads:That's the answer to your question. }See over there, against the far wall? Those aren't
exercise balls. You'll be able to see better when the watchman brings another candle. Look - baskets full of human heads, fresh as pork loins. Today's
crop from the guillotine. The bodies are carted off to the lime pits in the Madeleine Cemetery, but the heads are brought here where families can identify
their loved ones and take this much of them away for burial. Here, catch!
* Have some respect for the dead. -> Poor_dead_heads
* Won't the blade have destroyed the larynx? -> Search_for_heads
{ Why_collect_heads }
* Let's get what you need and be on our way. -> Sorting_heads

Poor_dead_heads
~ victor_empathy = victor_empathy - 1
I respect the living. The dead are gone, they're not here. These craniums don't hold a lifetime's memories, just a few pounds of rubbery grey jelly.
* What about their families? -> Got_to_take_a_head
* Are you looking for a brain, or a voice box? -> Search_for_heads
{ Why_collect_heads }
* What are we looking for? -> Sorting_heads
```

# Basic ink



```
par300
- rest
You settle down on the rocks to {night_time:sleep|regain something strength}. But before you manage to make yourself comfortable, you are disturbed by a deep rumble somewhere in
the earth below.
* Get up, quickly --> getup
* Ignore it --> ignoreit
- ignoreit
You ignore it; it is probably nothing. The next rock that launches is directly /beneath/ you.
-> dead-->shotrock
- getup
You stand to leave, and your foot dislodges a chunk of rock, which rolls away towards the fissure. But then abruptly it stops, reverses direction, and begins to roll towards you!
* Dodge left --> dodgeleft
* Dodge right --> dodgeright
* Stay still --> stayput
- dodgeleft
You dodge left,--> safe
- safe
and the rock shoots past you, impacting into dust against an overhang.
--> next
- stayput
You stay put, --> safe
- dodgeright
You dodge right, straight into the path of the reversing rock. It hits you painfully in the ankle.
~ harm(1)
--> next
- next
The rumbling is growing louder. An even bigger explosion is coming...
* Run for it! --> runforit
$ Magic: fail -> par300_fail, spells: ( DOZ -> par300_DOZ , MAG -> par300_MAG , WOK -> par300_WOK , FOG -> par300_FOG , HUF -> par300_HUF , FOF -> par300_FOF ), letters: [
DmWFH,0AU,ZGKF ]
- runforit
You turn and run.
-> par300
```

# “Microchunked”



```

par300
- rest
  You settle down on the rocks to {night_time:sleep|regain something strength}. But before you manage to make yourself comfortable, you are disturbed by a deep rumble somewhere in
  the earth below.
  * Get up, quickly --> getup
  * Ignore it --> ignoreit
- ignoreit
  You ignore it; it is probably nothing. A moment later, a rock shoots up from the ground, a few feet from where you are sitting. It smashes itself to dust when it lands, on the
  other side of you.
  * Get up --> getuppostblow
  * Stay sitting --> sitting
- sitting
  The next rock that launches is directly /beneath/ you.
  --> dead-->shotrock
- getuppostblow
  You get to your feet, not a moment too soon, as a rock explodes out of the ground, just a few spans from where you {par300_lookingforserpent:stand|are sitting}!
  It begins to roll down the slope towards the fissure, but --> halfwaydown
- getup
  You stand to leave, and your foot dislodges a chunk of rock, which rolls away towards the fissure. But --> halfwaydown
- halfwaydown
  then abruptly it stops, reverses direction, and begins to roll towards you!
  * Dodge left --> dodgeleft
  * Dodge right --> dodgeright
  * Stay still --> stayput
- dodgeleft
  You dodge left, --> safe
- safe
  and the rock shoots past you, impacting into dust against an overhang.
  --> next
- stayput
  You stay put, --> safe
- dodgeright
  You dodge right, straight into the path of the reversing rock. It hits you painfully in the ankle.
  ~ harm(1)
  --> next
- next
  The rumbling is growing louder. An even bigger explosion is coming...
  * Run for it! --> runforit
  § Magic: fail --> par300_fail, spells: ( DOZ --> par300_DOZ , MAG --> par300_MAG , WOK --> par300_WOK , FOG --> par300_FOG , HUF --> par300_HUF , FOF --> par300_FOF ), letters: [
  DmWFH,0AU,ZGKF ]
- runforit
  You turn and run.
  --> par30

```

## Reflowing



```

par300
- rest
  You settle down on the rocks to {night_time:sleep|regain something strength}. But before you manage to make yourself comfortable, you are disturbed by a deep rumble somewhere in
  the earth below.
  * Get up, quickly --> getup
  * Ignore it --> ignoreit
- ignoreit
  You ignore it; it is probably nothing. A moment later, a rock shoots up from the ground, a few feet from where you are sitting. It smashes itself to dust when it lands, on the
  other side of you.
  * Get up --> getuppostblow
  * Stay sitting --> sitting
- sitting
  The next rock that launches is directly /beneath/ you.
  -> dead-->shotrock
- getuppostblow
  You get to your feet, not a moment too soon, as a rock explodes out of the ground, just a few spans from where you {par300_lookingforserpent:stand|are sitting}!
  It begins to roll down the slope towards the fissure, but --> halfwaydown
- getup
  You stand to leave, and your foot dislodges a chunk of rock, which rolls away towards the fissure. But --> halfwaydown
- halfwaydown
  then abruptly it stops, reverses direction, and begins to roll towards you!
  * Dodge left --> dodgeleft
  * Dodge right --> dodgeright
  * Stay still --> stayput
- dodgeleft
  You dodge left,--> safe
- safe
  and the rock shoots past you, impacting into dust against an overhang.
  --> next
- stayput
  You stay put, --> safe
- dodgeright
  You dodge right, straight into the path of the reversing rock. It hits you painfully in the ankle.
  ~ harm(1)
  --> next
- next
  The rumbling is growing louder{-->ignoreit:, and this time you cannot ignore it}. An even bigger explosion is coming...
  * Run for it! --> runforit
  $ Magic: fail -> par300_fail, spells: ( DOZ -> par300_DOZ , MAG -> par300_MAG , WOK -> par300_WOK , FOG -> par300_FOG , HUF -> par300_HUF , FOF -> par300_FOF ), letters: [
  DmWFH,0AU,ZGKF ]
- runforit
  You turn and run.
  -> par300

```

## Callbacks



weave:neworleans

```

- I met Death in a smoke-wreathed red-lit bar in New Orleans, as the jazz band struck up another tune. He offered to buy me a bourbon.
  *"Holy mother of Heaven[.]," I blasphemed succinctly, -->
  *"Perhaps in twenty or thirty years?"[] I replied archly, -->
  *(wet)I threw my drink in his face[] in an automatic gesture of defence, -->
- as some of the other patrons snickered.
Death pulled off his mask to reveal handsome café-au-lait features and dark green eyes, and then extended a {-->wet:dripping} skeletal hand to me.
  *"A fine costume[.]," I remarked.
  "/Merci, mon cher/, -->
  *"You gave me a fright[.]," I admitted.
  //Since Death is speaking French, it seems odd to write PP's dialogue in English and then say it's French. Also, D's next statement is half and half, which again is illogical.
  Better to avoid specifying.
  "My deepest apologies, /mon cher/, -->
- I am Death at our neighbourhood Mardi Gras, and I am practising my role." He took my proffered hand and brought the back of it to his lips for a gallant kiss; he flicked me a rather
  unmistakable look under his dark lashes.
  * I returned his look[] with one of my own, and he let my fingers slip slowly through his. {raise(style)} -->
  * I pretended not to see [it] his look, or the sensuous tilt to his mouth, and he laughed. -->
  * To be so clearly desired by Death was unnerving[]. I found my feet feet, shaking, and stepped back.
  He tilted his face to the side. "Do you find my colour displeasing?" he asked, with a lazy smile.
  * * "Not that."
  He laughed, low and pleasing. "It matters little, /mon cher/. There are many white men in New Orleans who do. In spite of it, I am a free man."
  Death resumed his mask.
  I do not believe in prophecy, but the -->
  * * "My master will be missing me."
  "You have a master?" he replied, with an amused curl to his lips. "So you are a slave, then?"
  * * * "A valet."
  * * * {up(tension)} "After a fashion."
  * * * {not up(tension)} "More of a companion."
  - - - "You, /mon cher/, know little of slavery," Death replied tersely, resuming his mask.
  The -->
  - - chill of his cold fingers on my face sent a thrill of fear through me. Abandoning dignity, I ran from the bar, nerves rattling like knuckle-bones in a cup.
  -> DONE
- "You must call me Octave, /mon cher/."
  *"I am Passepartout[.]," I dipped my head slightly. "An appellation, as well as a burden."
  *"I hate my first name[.]," I admitted, with a half-smile.
- "Then I will choose another for you!" he decided, with a slanted grin. "A special name for you and me, tonight. 'Laurent', for you look a bit like a Laurent."
  *"Laurent...and Octave[.]," I agreed, with a slow smile. "They sound an intriguing pair."
  "/Bien sûr!" -->
  *Was 'Laurent' better than 'Jean'?[] Ah well, it was too late to argue the matter.
- Octave told me he was a free person of colour now; I was aghast to realise he had been a slave before the Civil War, and indeed still worked as a servant for the very same family!

```

# "Weave"



```
hub: yk_hn_main
- -> yk_hn_day1
- -> yk_hn_murder
- -> yk_hn_inv_starts
- I began my investigations
- I spent the next day
- A few days down, and I felt I had learned very little: or if I had learned a lot, I was too confused to see it! To try and clear my head, I spent a few hours
- I had barely any time left! Hawaii was fast approaching. -->time_running_out
-
- {not -->slowdown: -> yk_hn_final }
  I continued my investigations
- We had slowed down, giving me one more day in which to uncover the truth! I spent it
- -> yk_hn_final
* ... talking to Monsieur Jaffer[]. ... -> yk_hn_Jaffer
* ... in conversation with the captain[]. ... -> yk_hn_capt
* ... asking questions of Mademoiselle Carlotta[]. ... -> yk_hn_carlotta
* ... with General Peters[]. ... -> yk_hn_peters
* ... at the scene[]. ... -> yk_hn_scene
* ... mulling over what I had learned so far[]. ... -> yk_hn_muse
  { --> time_running_out }
* ... begging the Captain to slow down the ship[] to give me more time. ... --> slowdown
  { --> time_running_out }
===
- time_running_out
  I used what I had --> top
- slowdown
  He looked considered for a long moment, then nodded.
  ~ delay(1)
  >>> Incident: text = "An extra day to solve the case!"
  "Very well. But one day, Passepartout, and use it wisely."
  * I thanked him[] and wasted no more time, but rather ... --> top
  * I did not think one day would be enough[] but arguing got me nowhere. So ... --> top
```

# “Hub”



# Ink

- Optimised for humans and redrafting
  - Fast to type, scan and reflow
- Low cost of logic, especially for “history”
- Mix and match of flow structures
- But also
  - Flow control – if and switch blocks
  - Fully featured logic – variables, subroutines, functions, mathematics



# Branching



## “But, like, do my choices *really* matter?”

- At time of outcome? – callback
- At time of choice? – UI indicator?
- ...Both of these require player trust *first*



# Maps

Sorcery! (2013)



# Maps

80 DAYS (2014)



# Maps prove branching

- Visible cause-and-effect
- Visible unexplored content
- Medium-term strategy
- ...Basically, it's a pretty flow-chart
- Creates *expectation* of branching



£3,727

DAY 16

WEDNESDAY

2:39 PM



## Resources





# Resources

- Easy way to provide consequence
- Items can be “worked in”
- Resource UI contextualises narrative



£3,287

DAY 7  
4:47 PM

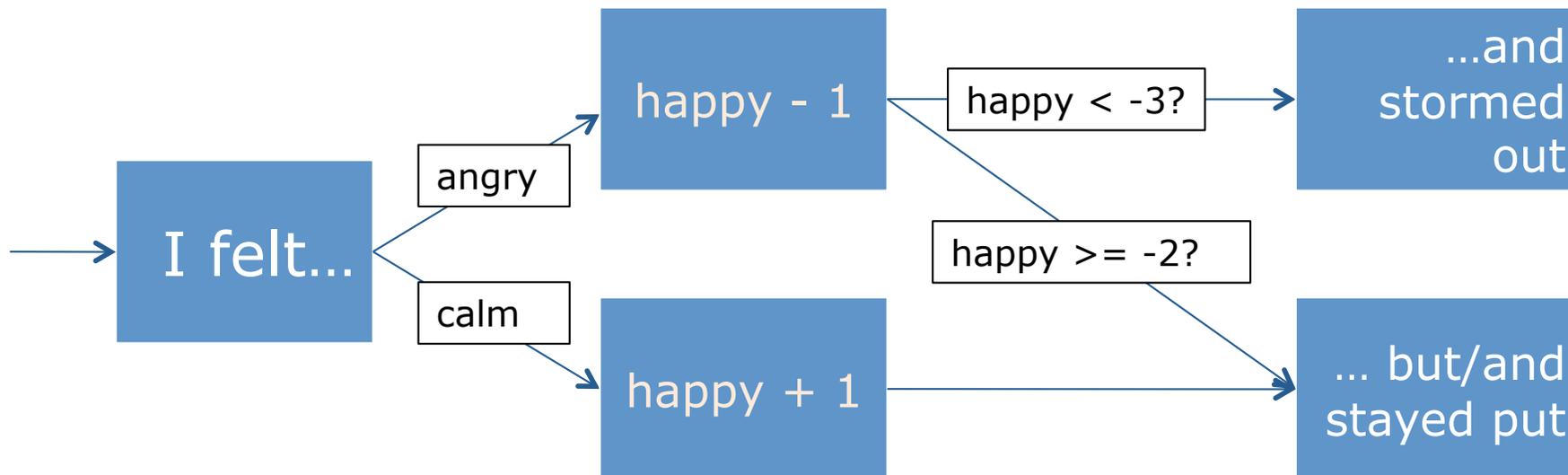
MONDAY

# Character



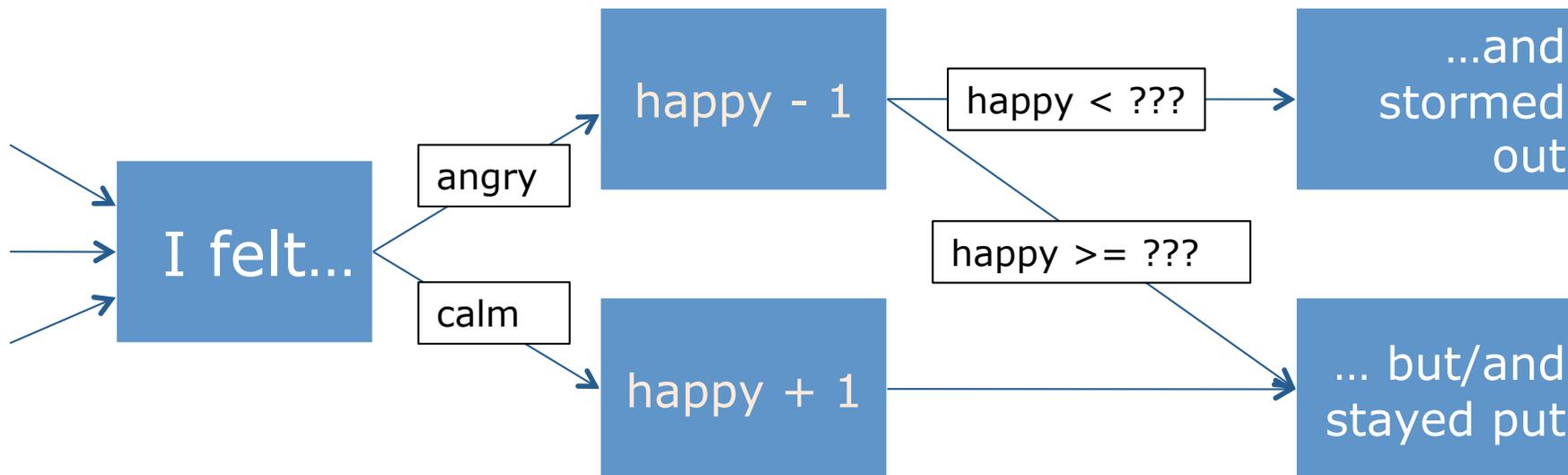


# Simplest +/- model





# Simplest +/- model ... fails



“How unhappy is unhappy?”



## Character tracking in a branching environment

- Internally, each stat is stored as *two* numbers which only ever increase

```
tension = (tension-up, tension-down)
```

- We record which kind of action the player took

```
raise(tension) => tension-up++
```

```
lower(tension) => tension-down++
```

- We query “what %age of actions were y?”

```
high(tension) = (tension-up / (tension-up + tension-down)) > 0.9
```

```
up(tension) = (tension-up / (tension-up + tension-down)) > 0.7
```

```
low(tension) = (tension-up / (tension-up + tension-down)) < 0.3
```

```
down(tension) = (tension-up / (tension-up + tension-down)) > 0.1
```



# Character tracking in a branching environment

- Details of character system are black-boxed
- Writer has two actions
  - ~ `raise(tension)`, ~`lower(tension)`
- ...and four queries
  - `high(tension)` `up(tension)`,
  - `down(tension)`, `low(tension)`

```
- Monsieur Fogg turned to me. "And what," he asked, most gently, "is this {up(tension):wild goose chase|, ah, diversion,} we find ourselves on?"
```



# Character tracking in a branching environment

- Consequences:
  - No balancing required
  - Game is “scattered” with stat changes
  - Self-stabilises: individual choices have less impact
  - All story outcomes are possible
- “Cons”:
  - Pretty hard to communicate to the player
  - Basically impossible to min-max



"You are in jest!" I told him in dignified affront. "You make mock of me, Monsieur."

"I am quite serious. Pack my evening jacket. There is not a moment to waste!"

*You, Passepartout, now have funds!*

*Your character is now polished.*

"But of course," I answered, still extremely suspicious.

He nodded. "Good. Pack my evening jacket. There is not a moment to waste!"

*You, Passepartout, now have funds!*

*Your character is now dependable.*

"But I have not prepared!" I said wretchedly, quickly trying to organise a list of necessary items in my mind.

"Then do it now. Pack my evening jacket. There is not a moment to waste!"

*You, Passepartout, now have funds!*

*Your character is now steadfast.*

*Skill* = adroitness, competence, ability

*Style* = extroversion, pizzazz, flair

		SCRUFF			MID			STYLE
		SCRAPPY			TIDY			SLICK
		5	10	30	50	70	90	95
SMART	95	crafty	knaveish	skilful	dab-handed	bright	superior	brilliant
	90	slippery	shrewd	sharp	dependenable	zestful	courageous	slick
	70	scrappy	cunning	astute	organised	well-heeled	suave	stylish
MID	50	ramshackle	careless	shabby	steadfast	presentable	polished	smooth
	30	grubby	loose	untidy	old-fashioned	mannered	manicured	chivalrous
	10	unkempt	dishevelled	slovenly	addled	dauntless	gallant	foppish
USELESS	5	calamitous	slapdash	slipshod	foolhardy	reckless	unpredictable	dilettante



# Plot Explosion



# Avoiding Explosions

- Different routes to same result
  - Shift the focus / sleight-of-hand
- Coerce the player
  - Nested options so the “forcing” is hidden
  - Use another character
  - Blatant clues!
- ... ultimately, gamers like explosions



# From Scene to Story

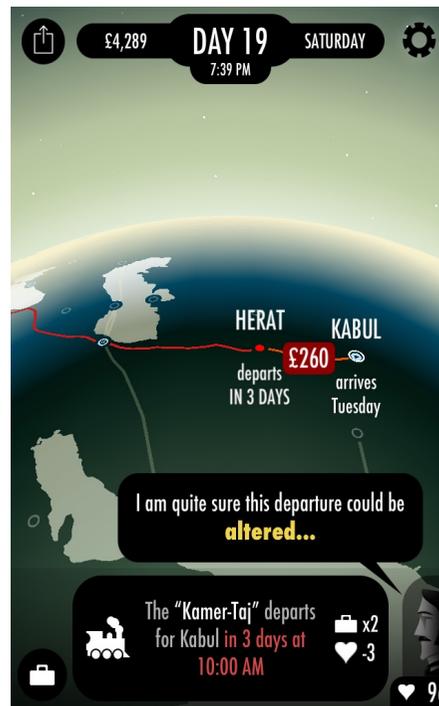


# Basic Loop



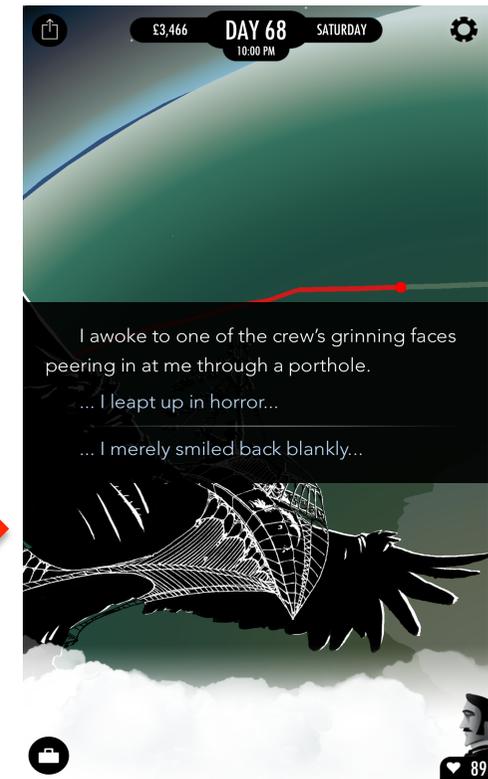
City Content

Market (optional)



Journey Choice

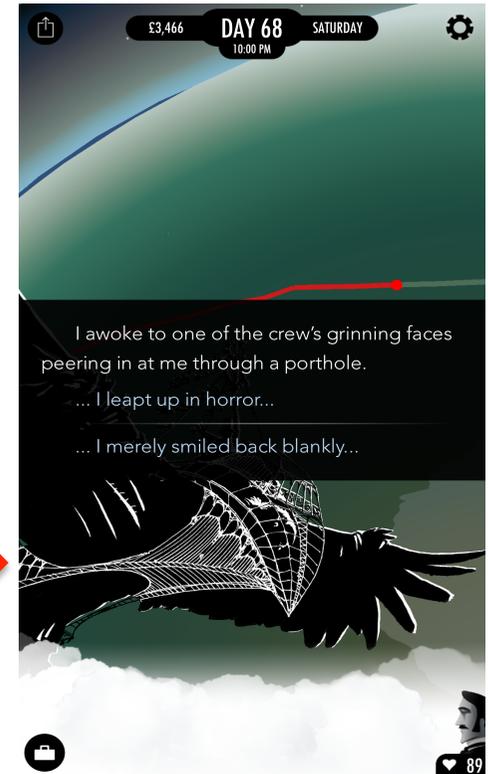
Fogg / NPC (optional)



Journey Content



# Revised Loop



Journey Choice

Market (optional)

City Content (opt)

Fogg / NPC (opt)

Journey Content



# Conclusions, or wot we think



- Meaningful choices
  - ... don't have to be big...
  - ... they can be simple and stack remorselessly
- Branching
  - ...do it, and prove it!
- Game below, story above
  - Reflect the game state in the story
- Authoring formats should enable humans



# Thanks for listening!

@inkleStudios  
[www.inklestudios.com](http://www.inklestudios.com)

**inkle**