

# Teaching Players:

## Tutorial and opening mission design for Company of Heroes

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# What we're going to talk about

- \* Breaking the game down into teachable concepts and methods
- \* Designing and implementing tutorials to convey those concepts to the player
- \* Opening mission design that reiterates those same concepts within the actual game







# Company of Heroes

- ✱ Released in September 2006
- ✱ Highest rated RTS game of all time
- ✱ PC Game of the Year 2006
- ✱ Average review score of 93%
- ✱ First expansion released in September 2007 - “Opposing Fronts”





# Different approaches to teaching players

- ✱ Nothing at all - they have a manual, don't they?
- ✱ Dedicated tutorial (or tutorials)
- ✱ Tutorials integrated with the single player campaign





# What are the benefits of a separate tutorial?

- \* A dedicated space for teaching the player
- \* Easily re-visitible by the player
- \* Allows the game proper to start with more intensity, if that's what you want
- \* Builds the player's confidence ahead of the game





# The goals of a tutorial

- ✱ Teach the player how to play the game
- ✱ Sell the gameplay to the player
- ✱ Be a solid and entertaining first experience of the game







# Breaking down gameplay: Designing the tutorial



# Breaking the gameplay into lessons

- \* You can't teach every single thing in your game
- \* Focus on the fundamental gameplay interactions
- \* Use broad categories rather than specific tasks
- \* How things are implemented is irrelevant, it's how they appear to the player that's important



# CoH tutorials

*Playthrough  
lengths*

- \* Really basic stuff

**7 mins**

Selecting units, giving orders, camera control, and major UI elements

- \* Infantry combat

**12 mins**

Using cover, move and attack orders, flanking, special abilities, unit upgrades, capturing weapons, and weapon facing

- \* Vehicle combat

**8 mins**

Crashing through walls, rear armour, repairing vehicles, and vehicle upgrades

- \* Resources and buildings

**18 mins**

Finding and securing resources, constructing buildings, ordering new units, building field defences, retreating back to base and reinforcing, and the Company Commander system



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# Organising lessons into a narrative

- \* Make your contexts believable, and build a flow from lesson to lesson that feels natural
- \* Remove or shortcut anything not directly involved in the task at hand
- \* Use safe areas or down time where you can introduce topics at a steadier pace
- \* Make sure the player *has fun* playing, and finishes with a sense of achievement



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# Driving the lessons home

- \* After you explain something, demonstrate the point
- \* Demonstrate it a second time!
- \* Exaggerate the effects of the player's actions
- \* Make the player feel that they're kick-ass



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# Sections

Start

Recognising cover

Cover in combat

Weapon facing

Flanking

Using abilities

Capturing weapons

Facing weapons

Upgrading

Sandbox



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# Building the lessons: Implementing the tutorial



# What you need

- \* The ability to monitor and control pretty much everything in the game
- \* The ability to monitor when the player initiates actions, as well as when actions complete
- \* Methods of restricting the player's actions - preferably in subtle ways so they won't notice!
- \* Solid methods of communicating with the player



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# Presentation tools

- \* Subtitles that you can keep up on the screen whilst the player completes a task
- \* A method of indicating an object or a location in the world
- \* A method of highlighting any part of the UI
- \* A way to display custom graphics on the screen



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# Some statistics

- \* Total development time: **4½ months**
- \* Time to play through the tutorial: **45 mins**
- \* Number of times checked in: **100 per section**
- \* Lines of dialog **325**
- \* Lines of SCAR script: **13,000**



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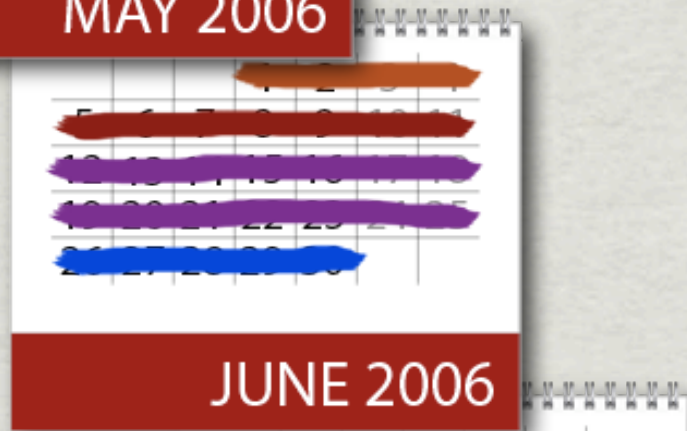
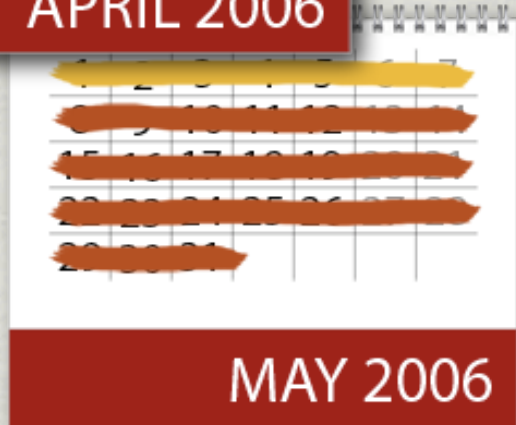
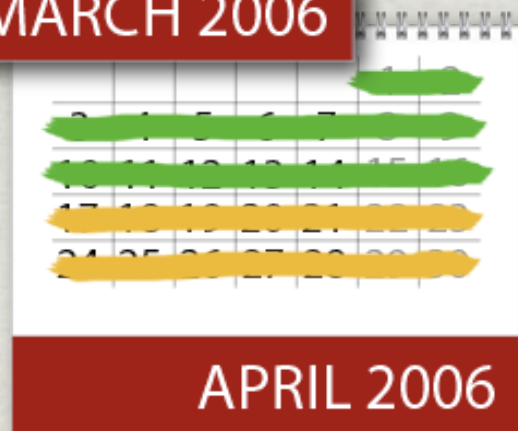


# What it took to make the CoH tutorial

- \* Just over four months, from initial design to ship
- \* One designer,  
one artist,  
and one single player support programmer
- \* Assistance from the audio team, production team, animation team and supervisors

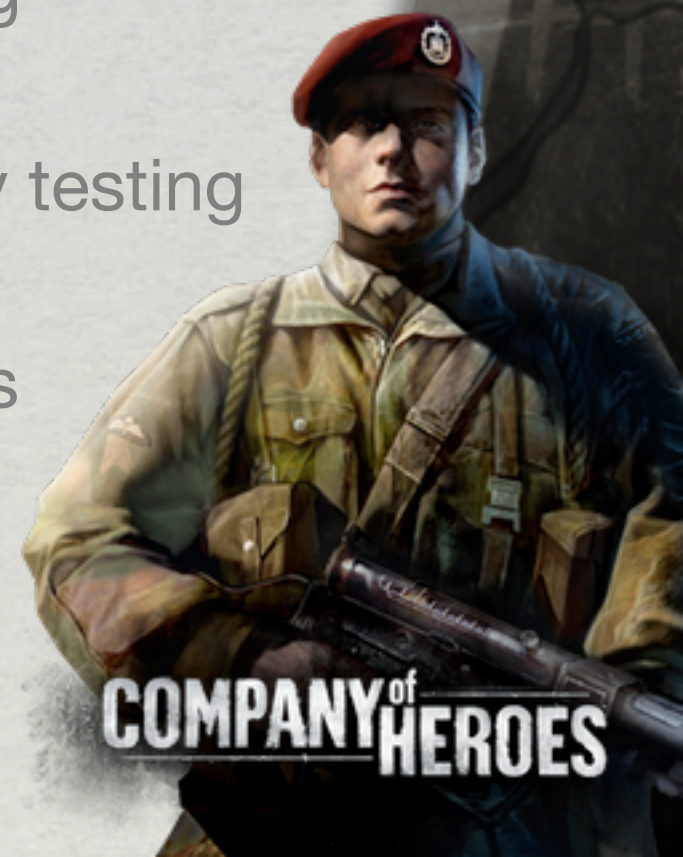






## Timeline

- Initial design  
2 weeks
- First draft  
3 weeks
- Second draft  
3 weeks
- Internal testing  
4 weeks
- Formal usability testing  
1 week
- Final design pass  
2 weeks
- Bug fixing  
3 weeks



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# Usability testing

- \* Observation
- \* Think about who you're getting to test the game at each stage of development
- \* Have the designers responsible there to watch - they have to watch people suffer!





# Some examples of usability improvements

- \* Left-click vs. right-click confusion
- \* Resourcing confusion
- \* Fine tuning of some of the pacing





# Recommendations

- \* Don't leave the tutorial until the last minute!
  - Needs the same high amount of care and attention as the rest of your game
  - Budget an appropriate amount of time and staff
  - Get the programming, art and UI support you need
- \* Tutorials are often the player's first experience, so make them enjoyable *as well as* useful



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# Applying the lessons: Opening mission design



# Easing into the opening missions

- \* The player can be anybody, at any skill level
- \* What if they don't play the tutorial at all?
- \* The first few missions are key
  - Must cover all of the important play mechanics during the first few missions
  - Must be easy
  - Must be *perceived* as challenging





# CoH mission design

- \* The initial D-Day landings (Missions 1 to Mission 4)
- \* The Battle of Cherbourg( Mission 5 to Mission 8)
- \* Operation Cobra (Mission 9 to 11)
- \* Closing the Falaise Gap (Mission 12 to Mission 15)





# Mission One: D-Day



*What there is:*

- Basic interaction
- A couple of simple choreographed uses of abilities
- Combat





# Mission One: Usability Testing

- \* Controlling all those units
- \* Number of times checked in: **295**

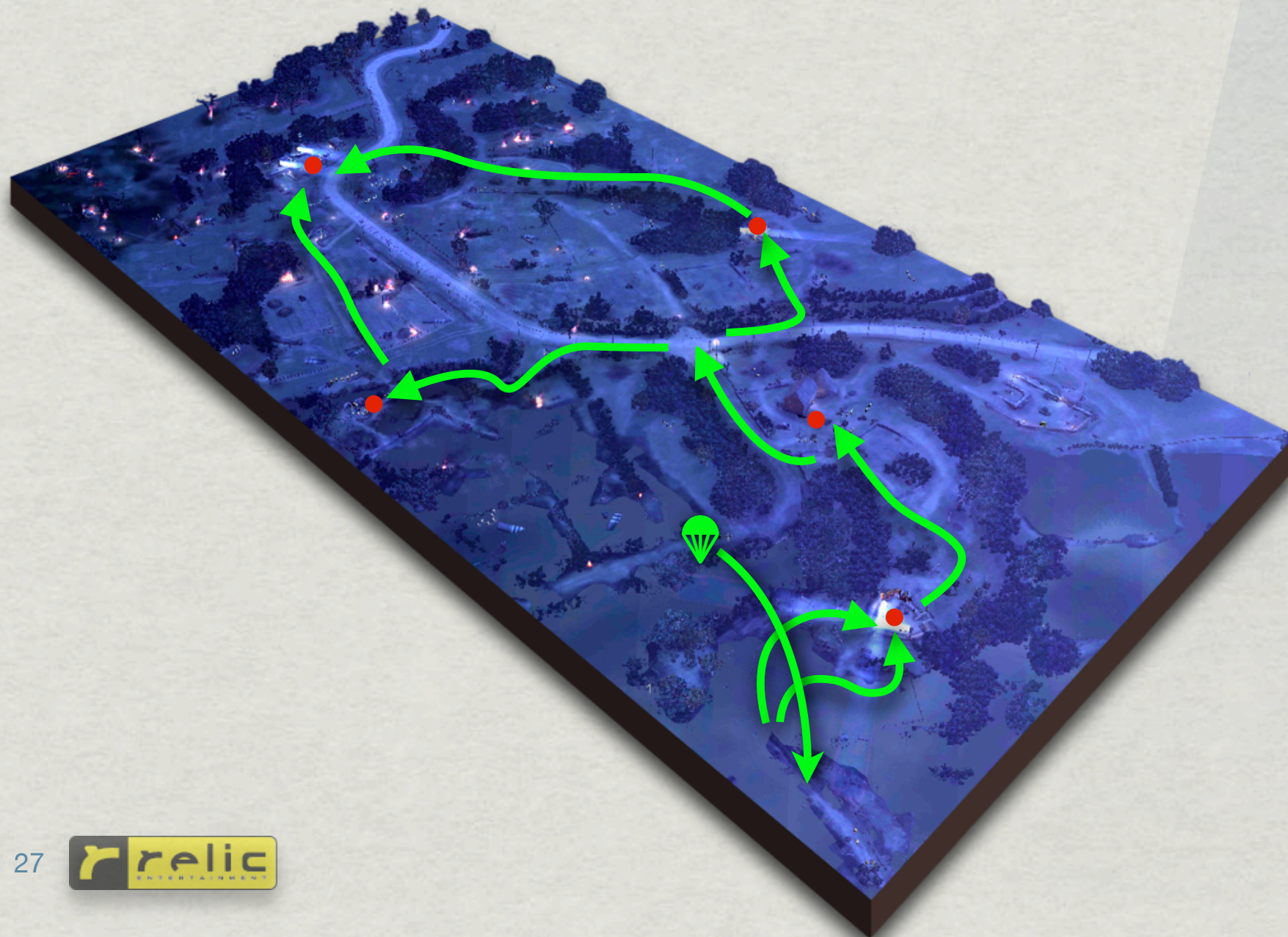




# Mission Two: Paradrop

*What we added:*

- Capturing points and territory
- Resources





# Mission Three: Carentan

*What we added:*

- How to build units from buildings
- Introduced new units such as Machine Gunners, Mortar Squads and Snipers



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# Mission Four: Carentan Defense

*What we added:*

- Building field defenses
- Retreating
- Introduced the Company Commander System





# Mission Three: Usability testing

- \* Too much choice, not enough guidance
- \* Memorable moments to guide the player through the mission
- \* Number of times checked in: **404**





# Mission Four: Usability testing

- ✱ Memorable moments in all our missions





# Final usability feedback

*What really does distinguish this game is the fact it has the balls to make you build up a base, defend it doggedly and then five minutes later annihilate it completely in a shower of shells.*

- [bit-tech.net](http://bit-tech.net)





# Final recommendations

- \* Break down your gameplay into teachable concepts and methods
- \* Reiterate the lessons from the tutorial in the gameplay scenarios of your opening missions
- \* Get usability feedback early, and iterate on the missions
- \* Clarity is the key







**Questions?**



# Thank you!

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