**TOMBRAIDER NEXTGENERATION**


**THE GAME**


The original 1996 release of Tomb Raider took the games market by storm. We intend Tomb Raider VI, the Next Generation to have as big an impact on its release.

Tomb Raider Next Generation will contain a new level of detail and complexity not seen in the game before.  This is the very least that the new platforms will demand but on its own this is not enough. It would be only too easy to take the old game and merely throw more polygons at it!

A past tendency for Tomb Raider has been huge sprawling levels that seem a little lifeless. We want to bring a level of interaction that truly conveys the sense of a real place with vibrant characters populating it.  This will involve generally smaller environments with more animations and much more to do within them.  At the same time however, occasional larger areas will be used to provide the cinematic grandeur that has always been a part of the Tomb Raider franchise.

Story FMV's and Cut-Scene's will be replaced by more fluid and interactive sequences flowing from the gameplay and character interaction. Story will be told and evolve throughout the game rather than just at isolated intervals. All rendered sequences shall use in-game models and environments so as to achieve a consistent style throughout.

Improved visual fidelity will be achieved in part by the use of multi pass textures. These will allow the reproduction of realistic lighting, shadows and surface detail representation. Polygonal models will have an increased level of detail approximately ten fold what has previously been possible. Game environment and character detail will be further realized by the inclusion of real-time cloth, examples of which are a curtain blowing in the wind or character clothing.

Backgrounds will react to Lara, for example the fronds of a large palm will bend as she pushes past.  Much more of what she encounters should be for her to manipulate, be it push, shoot, pickup, stand on, burn or whatever.  Big environmental changes like flooding, burning or exploding areas always had to occur whilst Lara was somewhere else, now we will be able to see them happen.

A myriad of characters will populate the areas Lara visits and she will be able to talk to many of them.  They might provide useful information or mislead her, so the player will have to decide whom to trust.  To gain characters' trust and help Lara may undertake small missions to further her greater quest.

Lara herself will posses more life like attributes, with variations on standard moves. Developing skill sets that improve with experience will reflect the direction in which the player pushes her. Health will be linked to her performance and regained from sources more diverse than just medi-packs. She will talk a lot more (full facial morphing), even to the extent of commenting on what she encounters which could provide hints for the player.

She will have a far more fluid control system, generally less regimented and block based, with animations blending to give a far more intuitive response.  Inverse Kinematics (IK) will be used to give the player more interaction with the game environment. Control will be analogue. This allows for a smooth transition between player actions giving the player finer control.

Combat, always the weakest aspect of Tomb Raider, will change completely.  It will be used more sparingly, involving more stealth and tactical elements, reloading of weapons and no unlimited ammo.

When an enemy engages Lara they will not just stand and shoot, or run toward her, but react more realistically to the situation. Combat situations will utilize the area they are staged in, impacting on the environments themselves.

Equally Lara herself will have more tricks like being able to independently equip each arm, strafing, ducking behind objects, and basic hand-to-hand combat

Back in 1996 everyone was thrilled by the fact that on the cusp of a technological leap, they could suddenly run around and explore three-dimensional tombs, solving puzzles, fighting and controlling a very appealing and well-drawn character.  Lara has lost none of her appeal and to do her justice greater, more involving worlds are needed for her to explore.

**TECHNICAL OVERVIEW**

Starting from the ground up, the game is being developed with an open architecture for multiple platforms, to enable the ease of platform porting and expandability for further iteration of titles. Current platforms expected to ship on are Playstation 2, X Box and high end PC's.

**1. GAME ENGINE SPECIFICATION**

- The game should have a frame rate of 60 fps.

- Use of light maps /shadow maps to create realistically lit environments.

- Real-time shadows on moveable objects and characters.

- Spring Mass Cloth Simulation for clothing and background aesthetics.

- Soft body animation (Hyper Patches).

- Multipass Rendering.

- All in game characters will be soft skinned.

- IK animation override.

- Character and Object Morphing for facial animation and object/baddie effects.

- LOD (Level of Detail) on characters.

- Atmospheric effects. i.e. Rain, Snow and Fog.

- Water Reflections and Underwater Caustics.

- External script control for FX, Traps, Puzzles etc, giving level designers more control and flexibility.

- Generic Base for portability.

## 2. LARA CROFT.

Control System

Lara's control system will be entirely re-written to be more intuitive and fluid. We aim to make the control less regimented, such as replacing the 'walk to ledge, step back and jump' method with something like the Mario control and playability. The ability to interrupt animations should also make the control system much more responsive

IK system will override animations to allow for trigger flexibility and accuracy when picking up objects, pulling switches etc.

Lara's Moves and Abilities

Most of Lara's current abilities/moves will be incorporated with many more random spot and reactive animations to achieve a higher level of detail and richness.

Lara can improve certain abilities with practice. i.e. She can learn to climb faster, or can use a certain weapon more effectively. Certain new abilities may become available if the player has practiced enough.

Lara will have much more interaction with her environment, i.e. picking up and using/studying objects or moving a chair to reach a high shelf.

Stealth Game play/ Abilities

Lara will have no lethal weapons in Paris and must rely on stealth game-play to evade or defeat enemies where lethal weapons cannot be used e.g. civilians, police and Louvre guards. She can sneak up behind them and render them unconscious. She can also use a variety of objects/noises to distract guards.

Guards will detect Lara if she crashes about noisily or runs past them. There may be a 10 second 'hiding' rule after which the guards will forget Lara, (ala MGS.)  An enemy left injured may still be able fire at Lara or set off alarms.

Weapons used in stealth situations – tranquilliser guns/crossbows, gas canisters will have a limited time effect etc. Enemies will be able to alert others or attack Lara when they regain consciousness.

Lara's Combat System

It is important that Lara does not appear helpless without guns, and will have basic weapons such as a baton or knife, which will be picked up early in the game. The use of these weapons will form a basic hand-to-hand combat system. i.e. when dealing with a guard she may use a baton swipe to knock him out.

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Weapons will have to be used wisely as there is now a limited supply of ammo and weapons need to be reloaded. She will start off in Paris with no weapons and slowly build up her arsenal.

Lara will now have the option of using only one gun, which will allow her to hold an item in her other hand. She may also be able to draw one gun whilst hanging from a ledge with one hand.

Lara will now be able to strafe and will have improved targeting i.e. Z Lock (Zelda). Possibly even independent targeting for each arm.  Independent injury of limbs for Lara and baddies, i.e. hold appropriate arm if shot etc. fun with a sniper rifle (think Goldeneye.) A headshot may take out a baddie in one go.

Damage and Health

Levels of damage will now affect Lara's abilities and be represented visually on Lara and not with a health bar. When wounded badly she will slow down and limp and be unable to run.  If she is underwater an increase in air bubbles can signify a lack of air plus an increase in tempo of music.

Her ability to perform certain moves may be impaired when she is wounded i.e. she may only be able to hang from a ledge for a limited time. She should have to wait and heal or treat herself with medical supplies.

She should have more interesting ways to maintain good health. Certain herbs or tonics may boost her stamina. Others may temporarily improve her reaction time. ( Redbull!)

## 3. ENVIRONMENTS

Far more detail will now be present in levels therefore locations will generally be smaller more focused. (Resident Evil / Metal Gear). However occasional larger areas will provide cinematic grandeur.

Backgrounds will react to Lara, for example the fronds of a large palm will bend as she pushes past.  More objects can be picked up/examined. Objects, which are shot/ hit by lara, will be destroyed/opened. Etc.

Drawers and doors may be opened by zooming in and handling. (Shenmue) However a cinematic camera should be employed to make the experience look cool.

Big environmental changes like flooding, burning or exploding areas always had to occur whilst Lara was somewhere else, now we will be able to see them happen.

Environments will feature realistic weather simulations i.e. rain turning to snow in Prague, puddles etc. Water effects should be improved with reflections and underwater caustic effects being more realistic. Light reduces with depth etc.

Each level of a location will be set in a specific time of day i.e. Paris will start at night, with level 2 being set at dawn. The Louvre may be set a dusk etc. Daylight may shift into evening/night light – streetlights come on, cafes open.


## 4. INVENTORY SYSTEM

The inventory system will now contain a limited number of objects. It will contain artifacts, medical supplies, puzzle items and miscellaneous items that Lara can use. i.e. ATM cards.  There should be a size limit to objects that can be put in her backpack. The inventory may also contain a health status display.

Lara will adopt Von Croy's notebook and make this her diary. Vital information will be automatically stored in the diary and may be flagged by a flashing icon. Other useful but non-essential info may be stored in the dairy.  i.e. sketches, newspaper scraps, photographs etc.


## 5. CHARACTER INTERACTION

Lara will be able to talk to many of the characters she meets.  The conversation system should allow the player some choice without being overly complicated or too far down the role-playing route.

The player will be able to guide the course of these conversations. This will use a dynamic, real-time system (rather than the usual 'choose a line of dialogue' approach usually found in adventure and role-playing games).

During the conversation, the player can make Lara be more *friendly* (flattering or sweet-talking the person she's speaking to), or be *unfriendly* (insulting or maybe even striking the other person).

A context option will allow Lara to talk to people about specific topics *providing she has already heard something about that topic*.

Branches of the conversation depend on a combination of Lara's responses (which will depend on the player's button presses), what information Lara knows (so what contexts are available) and the attitude of the person that she's talking to (which may change depending on how friendly/unfriendly Lara has been in previous meetings, bribes, etc.). Care will be taken to keep the length of conversations down to a minimum, or things will get very complicated.

Characters will react differently depending on Lara's approach or actions i.e. if she whips out her baton they may cower, comply or simply run away. Character will be able to lead or follow Lara, they may also pass or receive objects from Lara.

Characters attitudes may change depending on Lara's actions and may have a knock-on effect i.e. if you are constantly aggressive new characters might meet you with aggression.