The State of the Art and Going Forward
Defining priorities for E3

GOALS:
- To provide a summarized art critique of The Sims' current art content shortcomings
- To develop a set of priorities for improvement and addition so as to reach the "critical mass" necessary for The Sims to be deemed compelling enough to reach the floor at E3

THE STATE OF THE ART

Walls and Floors
Successes
- Wall and floor tiles have been succesfully unified in color and saturation, and have begun to find the range in developing rich texture maps to give a 3d impression.
- Wall and floor joins are now pixel perfect

Deficiencies:
- Repetition in patterned wall tiles is still very evident
- Walls and floors are only ambiently lighted, detracting from the 3d effect
- At very low light levels, wall discolors or bands
- Walls appear wafer thin/current "top strip" solution works only on junctions of equivalently lit wall tiles
- Walls lack "used" or "lived in" chaos (relates above repetition item)
- Low number of wallpaper choices keeps structure looking bland and regularized; defeats the ability to make a room "unique"
- Exterior of house is flat and unbroken in profile, like a box.; there is no visual richness other than the wall tile itself.

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Objects
Successes
- New objects show marked improvement in "pop", level of detail and reality.
- Color sets and material sets have begun to unify
- Noise, gradient and shadowcasting techniques introduced

Deficiencies:
- Edges of objects are not antialiased, defeating subtle curves, small details, and seamless interaction with background
- There is no satisfactory object shadow solution. Objects without shadows, due to lack of perspective, appear to float on background. Prerendering and dither-transparency technique has proved unsatisfactory on large numbers of otherwise satisfactory floortiles, and mediocre at best.
- Multitile objects either appear segmented or poke through adjacent walls.
- Natural materials such as wood and cloth still do not read well enough; details are muddy or repetitive.
- Appearances under lighting conditions are still not under control. Example: TV is very dark and shapeless at most lighting levels.
- Prerendered lighting creates conflicts between rotated identical objects
- Brushed metallic objecs show large divergences in appearance of specular highlight (Stove, sink)
- Carried objects do not rest where they are placed; after "dropping" the object (a plate, for example) the object snaps to a uniform place on the surface.

Characters and Animation

Successes
- Directional lighting has radically improved the appearance of the characters as 3 dimensional.
- New texturemaps have coordinated colors and saturations to balance "pop" and detail with richness.
- Walking and object interactions/registrations are generally solid, and turning has improved, especially around objects.
- Lamps and attentuated falloff has been introduced, to rave reviews
- Idles and motives have become communicative

Deficiencies:
- Characters appear too thin or insubstantial
- Characters lack excitement and unique feel
- Everyone has close-fitting clothing. We have no skirts, dresses, kilts, robes, coulottes, etc.
- Single skeleton limits variety of body types
- Characters are not antialiased against the background or themselves.
- Characters cast no shadows of any kind.
- Light settings for attenuated lights and ambient lights still not under control-characters appear too dim at minimum light and ramp up too quickly to fully lit, losing opportunity to show off attenuation and shadowing.
- "Popping" or skating still evident from time to time
- Framerate drops unacceptably low at slow game speed settings, destroying illusion of many subtle gestures.
- Characters pause too much between object and non-object interactions
- Some object animations are implemented incorrectly, or not at all, making behaviors appear confusing or broken.
- Many animations lack xevt's to properly coordinate sprite and character animations

Terrain

Successes
- New terrain shader contributes to a richer ground feel
- 2nd variety of tree, new bushes minimally improve feel of richness across exterior areas

Deficiencies:
- Ground appearance is still too regular and starkin opposition to rest of game window content
- Single-tile trees make forested areas appear as collonades, make trees appear very strange
- Tansparency and dappling of leaves in trees (and bushes) presents difficult rendering challenge: texturemaps with opacity mapping reduce the modeling and rendering time enormously, but introduce antialiasing artifacts from the background blue; straight modeling yields a truer render, but is a huge modeling and rendering time investment.
- No real landscaping elements
- No shadowing
- Lack of any real groundcover tiles or effects

UI

Successes
- A minimal UI that explicitly shows all functionality clearly was implemented

Deficiencies:
- UI is uncoordinated and disunified in almost all aesthetic areas
- UI lacks any overall motif or style
- Advanced functionality, such as tips, page turning, mode change effects absent

GOING FORWARD to E3

In order to achieve a critical mass of beauty for E3, we will have to pick and choose amongst the items above as to what to fix. Drawn from the above critique, here is what I see as being a stab at the highest priorities, taking the position thatwe will be making a "menu selection" from this list to build the full course meal that is our E3 appearance.

Please refer to the Art Postmortem document for further details on our expectations and needs relevant to any tools or procedures mentioned below in bold.

The Big stuff:

Characters:
• A limited number of extremely engaging characters are implemented
• Characters have unique appearance and clear style with coordination with walls, floors and objects
• Skirts and other loose clothing spoofs achieved
• Character texturemaps are clear and properly mapped
• Characters leave shadows or some darkening at contact with floor
• Maximum and minimum skin dimensions of at least 1 skeleton size are implemented for contrast
• Characters will use 3d "helper" objects such as watering can, broom, to enhance animation realism

Objects
• All objects in the game available to the user are of a consistent style and quality level.(**faster object availablity for preview**). Older objects will have to be reworked to reach the new standard.
• Pokethrough is abolished (**pokethrough tool**)
• A satisfactory object shadowing technique has been found and object shadows implemented
• Those small objects designed to sit on surfaces are in fact capable of being placed on surfaces.

Walls and Floors
• Walls appear thick with no exceptions and without being subject to room lighting
• Repetitive wall patterns are broken up by using several randomized tiles per wallpaper choice
• Exterior walls show added object detail, such as shutters, cornices, columns, drainpipes
• Dynamic cutaway
• Manual cutaway mode has more interest; top-of-wall and corner lines perhaps

Lighting
• Minimal light pools on walls and floors
• Dynamic Lighting of objects will be ambient-only. We will not expect to incorporate pixel-normal sprite lighting.
• Lighting curves for characters and objects have been made satisfactory
• Luminescent objects cast generalized light on room;Fridge/TV/Computer

Animation
• All walking, turning and idleing is seamless and at the best possible framerate
• All animations are properly registered to their objects, with propoer xevt entry to coordinate sprite animation (**improved animation preview tool**)

Terrain
• Landscaping objects are available, allowing users to create walled or terraced off areas; some kind of plantbed or garden building set of objects that fit together like the countertops; concrete, stone, brick and other exterior ground treatments
• Groundcover foliage objects should be enriched
• Improved multitile trees, multitree objects for density
• Improved layering and transparency on tree limbs
• Improved underlying terrain shader

UI
- UI should be unified and well on the road to final. If not a rougher version of our final design, it should at leastbe a very attractive interim version, consistent and polished across all functionality.
- Catalogs entries will have solid popups
- All splashscreens and edit windows required for E3 should be of a piece with the rest of the UI
- 3d objects incorporated into pop-up menu

Of the above list, I think the most important are:
- Near-final UI
- Object shadows
- Character shadows/darkspots
- Perfect registration, timing and appearance of all included objects-restrict object list to minimum
- Engaging characters with clear identities-fewer and better rather than more and worse
- Try to make a skirt
- Diverse idle/non-object animation set
- Better lighting curves
- Exterior walls have interest items (shutters, columns, misc. cladding, etc)
- Multitile trees/multitree objects
- Landscaping objects