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# CMPM 163 Notes

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## Insights from the Animation Industry

- Animation and film studios are increasingly using real-time technology to produce their works
- The traditional animation pipeline had avoided real-time technology as it was not “accurate enough” to achieve the desired results
- A **Lighting TD** will work with the primary director to establish narrative and visual storytelling through shot emotion and tone; they will typically also integrate VFX and physical simulations with existing models (hair, cloth, etc) in addition to homogenizing the inter-scene lighting aesthetic
- The construction of a lighted asset requires constant weighing of the dual considerations between “realism” and “believability”. A “realistic” effect is not always “believable”, and vice-versa
- The **Dappled Lighting** technique produces a “filtered distant-light effect” – imagine sunlight filtered through a tree canopy: the lighting effect produced by this environment is analogous.
- In some situations, it may be advantageous to light different objects within the same scene using different sets of lights - some lights only affect certain objects, etc.
- Lighting is more than adding realism or aesthetic quality : it can also be used as a design principle to construct scene geometry, establishing visual hierarchy, points of focus, etc.
  - effectively visual communication

## Insights from the Games Industry

- As a **Level Designer**, one will work as a director over a particular level of a game – deciding the layout, sequence of events, gestalt aesthetic, intended player dynamics, tempo and cadence actions, overall flow etc.
- To the question of whether working on violent/gory games affects you:

You take home with you what you work on – you’ll be working on it 8 hours a day and it sticks to you.

It’s a good idea to get the fundamentals of the game down on paper before anything else – try to avoid rebuilding the core once the “real” assets start rolling in.

Ideally, the “paper-map” stage is the point at which the designer finds the “broken” parts of the game. It’s typically more expensive (in terms of time and money) to fix once the system has been built.

Typical workflow of level design: Concept → Paper Map → White Box Digital Model → Actual Implementation

In a perfect world, all the mechanics of the game is *completed* during the White Box phase, before any final assets are added.

There are many stakeholders in the design of a game. Weighing the interests of each stakeholder is an important aspect of successful design.

## Humane Technology

- The fundamental questions of **Humane Technology** is to ask, “What do humans stand to gain from digital technology?”, or “How can digital technology be used to enhance the human experience?” and “How can digital technology increase inclusiveness and accessibility?”
- Principles of humane technology:
  - Human-centric design
  - Ethical consideration
  - Inclusivity, and Conscientiousness
- Basically, bring digital stuff back into the physical world as much as possible because that’s good for humans