## Plug & Play: The Intersections of Television Studies and Game Studies

## Computers, Play, and Convergent Screens

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Video games have always been intimately connected with both television and computer technologies and also popular understandings of these two technologies. They came into the popular imagination in the arcade of the 70s—small computer graphics on a television screen, calling to the player with lights and noise (and just size-based presence) to spend just 25¢ for the pleasure of play. The arcade cabinets were designed for both player and viewers—excellent games to play were fun to watch as well. Yet as Kocurek (2014) has argued, maintenance of these arcade games was dangerous. Coin-op route operators, who had historically mended their own pinball and cigarette machines, were suddenly called on to fix computer boards and televisions.

When the video game moved into the home, it happens at a historical moment when computers also become consumer commodities. When computers and video game consoles enter the home, they both employ the television screen for their visual interface—the television becomes the visual interface for computerized technology. This interface probably enabled the confusion surrounding video game consoles and computers—the technologies converged so much so that consoles marketed themselves as computers (Nintendo Family Computer or Famicom) and computers were sold as gaming devices (Atari Home Computers, see images below).





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ATARI HOME COMPUTERS We've brought the computer age home." Even as the technologies of computers and consoles as well as television screens and computer monitors diverged, the imagined convergence between these two technologies was prolonged. Nintendo, for example, continued to develop their consoles for computer use well into the '90s with the Nintendo 64DD and mouse controller (see deWinter). The break between the computer and the console does completely occur, arguably, until the release of the PS2 in 2000. Sony firmly aligned the PS2 with the television, heavily marketing the DVD player for television entertainment purposes as one of its key selling features.

Through the late 90s and 2000s, video game consoles continued to evolve, and the debate between computer games and video games moved to the forefront. Computers were more nimble in adapting to the processing needs of new games, whereas game designers had to design for rather static console systems that might not be updated for ten years or more. In response to consumer demands, consoles had to develop greater processing speeds and better graphics cards. People wanted consoles to be computers. Game companies like Microsoft and Sony responded, developing complex console systems with powerful computer hardware; however, these technologies are not cheap, yet consumers did not want to pay computer prices for game consoles that were only meant for television-mediated entertainment (see Huntemann).

Consider the fact that people were willing to spend \$400 for a 5GB iPod in 2001, while at the same time, the Xbox sold for just \$300. While there is an expectation that consoles will make money back based on the publishing agreements for the software titles (for every game sold, the console companies get a set amount), this does not entirely account for consumers' insistence on lower prices. When the next generation of consoles came out, the consumer market was so offended by the cost that the companies had to quickly drop the price. And let's be clear here: These are powerful systems, and people have tethered Xboxes together to create advanced computers.

Computer and consoles are now converging once again, and this is again because of changes in television technologies, and this has to do with the redefinition of televisions as a multimedia interface. Computers, disk players, and game consoles can now be connected to televisions using a High Definition Multimedia Interface (HDMI) cable and large computer monitors are increasingly replacing TVs in the home as the screen technologies are increasingly interchangeable. People can use their wireless keyboard or smart phone to search Netflix and stream television programs through cables that were originally intended for computer-based Internet use. Thus, the expectations for video games are once again converging with computers via the visual interfaces and spaces dominated by the simultaneously converging screen technology of monitor and television.