Hackers

The Cyberpunk Project

Hackers are the elite corps of computer designers and programmers. They like to see themselves as the wizards and warriors of tech. Designing software and inventing algorithms can involve bravura intellection, and tinkering with them is as much fun as fiddling with engines. Hackers have their own culture, their own language. And in the off-hours, they can turn their ingenuity to sparring with enemies on the Nets, or to the midnight stroll through systems you should not be able to enter, were you not so very clever. Dark-side hackers, or crackers, slip into systems for the smash-and-grab, but most hackers are in it for the virtuoso ingress.

It's a high-stress life, but it can be amazing fun. Imagine being paid - well paid - to play forever with the toys you love. Imagine.

From St. Jude, Mondo 2000: Users's Guide to the New Edge.

A hacker is the one who:

- 1. Enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary.
- 2. Programs enthusiastically (even obsessively) or who enjoys programming rather than just theorizing about programming.
- 3. Is good at programming quickly.
- 4. Is an expert at a particular program, or one who frequently does work using it or on it; as in "a Unix hacker".
- 5. Is an expert or enthusiast of any kind. One might be an astronomy hacker, for example.
- 6. Enjoys the intellectual challenge of creatively overcoming or circumventing limitations.
- 7. Is a malicious meddler who tries to discover sensitive information by poking around. Hence "password hacker", "network hacker". The correct term for this sense is cracker.

Hacking and Cracking

The term "hacker" has come to be associated exclusively with breaking security. That isn't what it is at all, but hackers were willing to state their total contempt for security people, because security was one form of bureaucracy. First-generation hackers would break security because it was in the way of doing something useful. Now a lot of kids do it 'cause it's naughty. Though it is true that showing you can break security that's said to be unbreakable is a nice hack, the original hackers did not break security just to be naughty. They broke security if somebody had locked up a tool that you needed to use.

Different Types of Hackers

Hacking broadly refers to attempts to gain access to computers to which one does not possess authorization. The

term "hackers" first came into use in the early 1960's when it was applied to a group of pioneering computer aficionados at MIT (Levy, 1984). Through the 1970s, a hacker was viewed as someone obsessed with understanding and mastering computer systems (Levy, 1984). But, in the early 1980's, stimulated by the release of the movie *WarGames* and the much publicized arrest of a "hacker gang" known as "The 414s", hackers were seen as young whiz-kids capable of breaking into corporate and government computer systems (Landreth, 1985:34). The imprecise media definition and the lack of any clear understanding of what it means to be a hacker results in the mis-application of the label to all forms of computer malfeasance.

Despite the inter-relationship between phreaks and hackers, the label of "hacker" is generally reserved for those engaged in computer system trespassing. For CU participants, hacking can mean either attempting to gain access to a computer system, or the more refined goals of exploring in, experimenting with, or testing a computer system. In the first connotation, hacking requires skills to obtain valid user accounts on computer systems that would otherwise be unavailable, and the term connotes the repetitive nature of break-in attempts. Once successful entry is made, the illicit accounts are often shared among associates and described as being "freshly (or newly) hacked".

The second connotation refers to someone possessing the knowledge, ability, and desire to fully explore a computer system. For elite hackers, the mere act of gaining entry is not enough to warrant the "hacker" label; there must be a desire to master and skill to use the system after access has been achieved:

It's Sunday night, and I'm in my room, deep into a hack. My eyes are on the monitor, and my hands are on the keyboard, but my mind is really on the operating system of a super-minicomputer a thousand miles away - a super-mini with an operating systems that does a good job of tracking users, and that will show my activities in its user logs, unless I can outwit it in the few hours before the Monday morning staff arrives for work... Eighteen hours ago, I managed to hack a password for the PDP 11/44. Now, I have only an hour or so left to alter the user logs. If I don't the logs will lead the system operators to my secret account, and the hours of work it took me to get this account will be wasted. (Landreth, 1985: 57-58)

An elite hacker must experiment with command structures and explore the many files available in order to understand and effectively use the system. This is sometimes called "hacking around" or simply "hacking a system". This distinction is necessary because not all trespassers are necessarily skilled at hacking out passwords, and not all hackers retain interest in a system once the challenge of gaining entry has been surmounted. Further, passwords and accounts are often traded, allowing even an unskilled intruder to erroneously claim the title of "hacker".

Our data indicate that, contrary to their media image, hackers avoid deliberately destroying data or otherwise damaging the system. Doing so would conflict with their instrumental goal of blending in with the average user to conceal their presence and prevent the deletion of the account. After spending what may be a substantial amount of time obtaining a high access account, the hacker places a high priority on not being discovered using it, and hackers share considerable contempt for media stories that portray them as "criminals".

Hacker's Ethic

Although sometimes skirting the law, hackers possess an explicit ethic and their primary goal is knowledge acquisition.

The Hacker's Ethics

This paper includes the Hacker's Ethics formulated by Steven Levy, and some additions into it, and a couple of thoughts about it and whether anything like "hacker's ethics" exists at all.

References

On the Wrong Side of the Law?

Scientists and Hackers

An article from Boston Globe Online about hackers and the word hacker.

Old Hackers, New Hackers: What's the Difference?

Cyberspace Wars: Microprocessing vs. Big Brother

How to be a Hacker

A Portrait of J. Random Hacker

The Social Organization of the Computer Underworld

A thesis for the degree Master of Arts.

A Short History of Hacking in America

The Early Days, The Renaissance, The Future.

Links

Hacker's Jargon

A comprehensive compendium of hacker slang illuminating many aspects of hackish tradition, folklore, and humor.

Jargon dictionary, hacker writing and speech style, lamer-speak, hacker folklore, and a portrait of J. Random Hacker, a typical hacker.

By hackers themselves.