# Introduction

Newborns in Evolution

*We're still in the first minutes of the first day of the Internet revolution.* – Scott Cook

It's 10:30 P.M. and the day seems almost over. The kids finally fell asleep. My wife is reading in the living room. At last, the house is quiet. Doing a bit of reading myself is a possibility, or perhaps a round of channel surfing on TV. But I decide against it. Something more intriguing waits for me beyond the walls of my home, something that uniquely mixes work with play. Having just published my book on contemporary psychoanalysis and Eastern philosophy, which I considered a swan song for that stage of my career, I found something new and exciting to study, another realm to explore as a psychologist who loves to apply his discipline to something seemingly far afield of the mainstream. I settle into the swivel chair at my desk, fire up my brand new and very own computer – for I am the first in my neighborhood to have one – and I head into that wonderfully mysterious new world that I had discovered only a few months before, a world only geeks like me appreciated or even knew existed. Even though we are an oddball collection of people, we all suspect that this new space is leading us onto a path that could empower all people, as long as we avoid the pitfalls along the way.

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### THE BIRTH OF CYBERSPACE

Just yesterday, comparatively speaking in the many millennia of our evolution, we humans did something quite remarkable. We created an entirely new environment for ourselves, one that intersects but also transcends the physical world as we have known it for all these hundreds of thousands of years. People called this new digital realm "cyberspace."

The coining of that term is attributed to William Gibson, who popularized it in his 1984 debut novel Neuromancer, which tells the story of a down-and-out computer hacker hired by a mysterious employer to carry out the ultimate hack. We now associate the term "cyberspace" with any activity or experience that occurs online and via the many devices that connect us to that ubiquitous space. A variety of other expressions have been used to refer to this digital realm, such as the Internet, the net, the web, social networks, social media, or "being online." These terms are often used interchangeably, even though in a strict technical sense they do not mean the same thing. The fact that our terms continually change even when they refer to similar environments reflects our preoccupation with "new and better" as well as our coming to grips with this seemingly ever-changing, elusive world of technology. Whatever terms we do use, and I will use them all throughout this book, the essential idea is that this digital realm is a unique environment for humanity, a special kind of space created by computers - a "cyberspace."

Even though the word "cyber" is usually associated with digital networks and the computers that comprise them, another science fiction writer, Sterling (1992), claimed that we can trace the origin of cyberspace a bit further back in time – maybe the day before yesterday – to the very beginnings of the electronic frontier, when telegraph, radio, television, and especially the telephone enabled humans to communicate with each other in an imaginary space "out there," an ethereal space somewhere between you and me. Although the exact time cyberspace was born might be a matter of debate or definition, its history after the broadcast age of telephones and television, very succinctly outlined, goes something like this:

In the 1960s, wide geographic networks were developed to enable distant computers to communicate with each other. Academics and government researchers used these networks to share information, one of the most successful being the Advanced Research Projects Agency Network (ARPANET). The U.S. Defense Department supported research into these widespread networks, as it was hoping for a flexible communication system that could survive a nuclear attack because it did not rely on a single

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center of control. Licklider (1960), an American psychologist and computer scientist at the Massachusetts Institute of Technology (MIT), envisioned – some say in a tongue-in-cheek fashion – a "Galactic Network" of globally interconnected computers through which everyone could quickly access information and programs. Other prominent scientists made similar predictions.

By the early 1980s, such visions began to materialize. The invention of the Transmission Control Protocol/Internet Protocol (TCP/IP) communication protocol enabled all the once separate networks to talk with each other. The system of interconnected computers grew larger and larger, culminating in what people called the Internet. Mostly computer experts, engineers, scientists, and librarians used it, but soon nontechnical people joined them in this new realm.

At that time, it was all text communication. There were no pictures or sounds – just lines of letters and numbers.

In the early 1990s, hypertext was invented. It overcame the limiting way cyberspace operated: when people on a personal computer connected to a site somewhere on the Internet, they had to disconnect from that location then return back to their personal computer before going anywhere else. Instead, thanks to hypertext, by clicking on links embedded within text, people could move more freely from one location to another, within an expanding interlaced network of connections, somewhat similar to how the human brain works. Very aptly, it was called the World Wide Web. People used "browsers" such as Lynx to travel through the "pages" of this web. As the term "hypertext" suggests, it was still all text communication.

That would soon change in a way that would dramatically transform the psychological experience of cyberspace. In 1993, with the introduction of the popular graphical browser Mosaic, the web became visual. In addition to reading and writing, people could now see images, including graphics and photographs. Sound files and videos followed. Webpages grew more sophisticated in visual, conceptual, and functional design. Due to the enhanced sensory qualities of this fascinating web, more people began going online, forming many different kinds of relationships, groups, and communities, a movement that boomed when the Internet became commercialized with the relaxing of government restrictions on its use.

The space "out there" first created by radio, telephones, and TVs had blossomed into a complex global environment, far beyond a simple broadcast empire, with levels of participation, interactivity, and media sophistication that surpassed anything previously known in human history. Rooted in 4

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the real physical world, cyberspace grew into a complex ethereal world unto itself, with some traditions carried over from the old world and some new ones invented. Eventually every type of communication device linked to cyberspace, including all varieties of institutional and personal computers, as well as phones, TVs, cameras, radios, navigation devices, tablets, glasses, and appliances – to the point where it became hard to define where this cyberspace began and where it ended. Thanks to our creation of these interconnected electronic devices, we humans developed the ability to manifest our ideas, customs, personal identities, and relationships with others in a space filled with buzzing electrons that we controlled.

Humans had become electric.

#### THE BIRTH OF CYBERPSYCHOLOGY

It was not long after the appearance of the Internet that cyberspace caught the attention of social scientists. They realized that a very unique dimension for human behavior was opening up right in front their eyes, one that enabled versatile communication between individuals as well as the creation of groups of many sizes and configurations. Unlike the mass media of TV and radio, cyberspace offered powerful opportunities for social interactions among many people, among different types of people, from many geographic locations, for all types of purposes. It was a social psychological environment with a magnitude of complexity, subtlety, and adaptability no less sophisticated than the physical world. With the 1985 appearance of such virtual communities as The WELL (Whole Earth 'Lectronic Link), visionary nonfiction writers began recounting tales and offering theories about online human interactions, including Howard Rheingold's groundbreaking 1993 book *The Virtual Community*.

Some of the first psychologists to study online behavior, including myself, proposed a new discipline within our field that we called *cyberpsy-chology*. Along with colleagues that included Azy Barak, Michael Fenichel, John Grohol, Robert Hsiung, Storm King, Gary Stofle, and Kimberly Young, we advocated the need for psychological investigations into what people were doing on the Internet, including the potential benefits and hazards of cyberspace. Our voices echoed those of other psychologists from around the world, such as Tikhomirov, Babaeva and Voiskounsky (1986) in Russia, who anticipated a "psychology of computerization." When my colleagues and I joined together with clinicians of other mental health disciplines from around the world, we explored the possibilities for conducting psychotherapeutic interventions via email and chat, the use of the Internet for

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widespread education about mental health, and the psychologically healthy as well as pathological uses of cyberspace.

Many psychologists at the time focused on mental health issues in cyberspace, particularly the prospects for online psychotherapy and controversies about the now widely recognized existence of Internet addiction. Other researchers, including myself, also pointed to the need for expanding our psychological research into other areas of online behavior. After having completed my book that integrated contemporary psychoanalysis with eastern Thought (Suler, 1993) - the same year that the World Wide Web went visual – I saw cyberspace as fertile territory for the kind of qualitative, experiential, and immersive research that I loved. It was also an extension of my interest in computers since my graduate school days, especially the use of "Eliza," an artificial intelligence psychotherapy program that I used in teaching my students about clinical psychology. Relying on such methods as participant observation, case studies, interviews, focus groups, and field research, I began writing about my experiences with computer-mediated communication. In 1996, I launched my online hypertext book The Psychology of Cyberspace, the first book about this topic that was widely cited. I continued to revise and expand it over the following decade, with journal articles and book chapters as spinoff publications. In this online book, I explored a broad range of topics that reflected the fundamental questions that have always been important within the diverse discipline that is psychology and that now carried over into this new environment called cyberspace:

- How do individual people react to cyberspace?
- How do people interact with each other online?
- How do people behave in online groups and communities?
- What is normal and abnormal behavior?
- How can cyberspace promote mental health?

The topics I addressed in *The Psychology of Cyberspace* reflected some of the many different types of studies that began to appear in the field of cyberpsychology. As more psychologists and other social scientists joined the research efforts, areas of expertise emerged. New journals devoted specifically to cyberspace appeared, such as *CyberPsychology, Behavior, and Social Networking; Cyberpsychology: The Journal of Psychosocial Research*; and the *International Journal of Cyberbehavior.* In 2007 and 2008, the Institute of Art, Design, and Technology in Dun Laoghaire, Ireland, and Nottingham Trent University in the United

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Kingdom launched the first graduate programs in cyberpsychology. Research centers devoted specifically to cyberpsychology appeared, such as Cyberpsychology Research at the University of Wolverhampton (CRUW), the University of Bolton Computer and Cyberpsychology Research Unit (UBCCRU), and the Cyberpsychology Research Center in the Institute of Leadership at the Royal College of Surgeons in Ireland. In 2015, CBS introduced its *CSI: Cyber* series about a forensic cyberpsychologist, based on the work of Mary Aiken. Despite some skeptics who perhaps too quickly overlooked cyberpsychology, or who claimed outright that nothing important was happening online, research continued to expand in many directions.

Aspects of cyberpsychology are now incorporated into many areas of study at universities around the world, including law, journalism, sociology, communications, economics, design, information technology, public policy, law enforcement, and international relations. These studies inspired the formation of a variety of centers devoted to online research, such as Pew Research Center's Internet and American Life Project; the HomeNet Group at Carnegie Melon; the Berkman Center for Internet and Society at Harvard University; NetLab in Toronto; the Center for Mobile Communication Studies at Rutgers University; the Multimedia Research Group at University of California, Santa Barbara; the Oxford Internet Institute; the World Internet Project at the University of Southern California (USC); HomeNet Too at Michigan State University; and the MIT Media Labs. While obviously interdisciplinary, cyberpsychology can also lead us back to a renewed understanding of traditional psychology - how it can help us explain human behavior in cyberspace, as well as how it must expand into new avenues of research.

### A NEW ARCHITECTURE

Anyone who has taken a course in introductory psychology quickly realizes how vast this territory is – it encompasses everything from brain functioning to existential arguments about the meaning of life. So too since its inception, cyberpsychology has grown increasingly diversified. In his book providing a comprehensive overview, Norman (2008) discussed how an effective computer interface parallels the natural ways humans perceive, think, and behave; individual differences in attitudes about computers; computer-mediated interpersonal relationships; abnormal behavior and psychotherapy in cyberspace; automated interactions with computers; and

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artificial intelligence. In other edited and single-authored books on cyberpsychology (Aiken, 2015; Amichai-Hamburger, 2005; Attrill, 2015a; Barak, 2008, Joinson, 2003; Joinson et al., 2009; Power & Kirwan, 2014; Yan, 2012), we see a similar explosion of issues concerning cyberpsychology: Internet addiction, cybersex, online flow experiences, mobile phone separation anxiety, identity theft, cyberchondria, deception in online dating, gendered website designs, personality traits that affect social media usage, the use of the Internet in education, and attitudes about computerized psychotherapy. Like its parent discipline of psychology, cyberpsychology has a multifaceted quality that makes it ripe for interdisciplinary efforts with other social sciences. In fact, the interdisciplinary spirit called out to cyberpsychology from its very beginnings, due to its inevitable linkage with communication technology.

In order to establish itself as a new discipline, cyberpsychology needed to embrace its heterogeneous, multidisciplinary nature while also maintaining its unique identity as psychology. And so, holding true to our parent discipline, we cyberpsychologists applied traditional psychological concepts to explaining life online. For example, why do some people act blatantly inappropriately on the Internet? Perhaps it is due to the fact that cyberspace offers a heavy dose of something old school psychology previously identified: the unleashing power of anonymity.

Later we began to wonder whether traditional psychology would be sufficient to understand people in this very new environment. Might we have to modify old theories or propose new ones? As we will see in Chapter 4, "The Disinhibited Self," I discovered a variety of reasons why people behave online in ways they would not in person, rather than just due to anonymity. In what would become one of my most widely cited articles, I proposed the concept of the *online disinhibition effect* (Suler, 2004a), which pinpointed several factors, some of them specific to cyberspace, that account for the unleashing of otherwise suppressed actions. Providing another example of new conceptualizations, Kimberly Young (1998) was one of the first psychologists to suggest that Internet addiction was not just a subtype of other well-known addictions but something quite unique.

Over time, a wide variety of novel terms and theories surfaced in cyberpsychology and related fields. As is always the case in the history of any type of research, newly proposed ideas complement or compete with each other. Some theories endure, others come and some go. Only the test of time reveals which ones offer the most explanatory power. We must always be on the lookout for ideas that are new and good, while remembering that CAMBRIDGE

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what is new is not necessarily good, and what is good is not necessarily new. Charles Darwin said:

It is not the strongest or the most intelligent who will survive but those who can best manage change.

The diversity of cyberpsychology is both a blessing and a curse. It lays claim to explaining all varieties of online phenomenon while running the risk of growing so multifarious that it loses a recognizable shape as a unified discipline. For this emerging body of knowledge to succeed as a distinct entity that we call cyberpsychology, it requires grounding in a new type of psychological framework for understanding the unique digital realm we humans created. By identifying the most elemental, technology-driven dimensions of our online world, as I propose in Chapter 1, "Cyberpsychology Architecture," we can decipher the features of cyberspace that determine how we humans perceive, feel, think, and behave within it. This cyberpsychology architecture can follow the tradition in psychology that distinguishes it from other social sciences – the tradition of understanding the individual person, including how the person relates to others, groups, and the online environment itself.

## A PSYCHODYNAMIC CYBERPSYCHOLOGY

Given the complexity of cyberpsychology, it would be impossible for any one book to discuss this topic in a fully comprehensive, in-depth manner, covering all research and theories. As such, I would like to clarify the particular approach I take in this book. By examining the table of contents, you can see the topics I have chosen to explore. They come from my many years of research in which I and my students immersed ourselves into different realms of cyberspace, the kinds of topics that would catch the eye of anyone who takes the time to develop an online lifestyle. They also reflect the major categories of psychology that I mentioned earlier: the individual, interpersonal relationships, groups, abnormality, and mental health.

The field of psychology contains several different theoretical positions for studying human behavior, such as the behavioral, cognitive, humanistic, and psychodynamic styles. Although I draw on all of them in this book, I mostly rely on the last two, particularly psychodynamic theory, which includes the traditional ideas introduced by the early psychoanalytic thinkers, along with more contemporary approaches such as object relations, self-psychology, and psychoanalytic phenomenology. No other

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theory more thoroughly examines the depths of the human *psyche* – which is what the word "psychology" means – including how that psyche determines personality styles, interpersonal relationships, and the social dynamics of groups. Psychodynamic theory also specializes in the investigation of how the unconscious influences us in cyberspace without our realizing it, perhaps even more so than in the real world. As we will see, it is this unconscious mind that leads us to create lifestyles in cyberspace based on things we do not even realize about our "real" lives. With its intense focus on the intrapsychic world, psychoanalytic theory provides many helpful tools to understand cyberspace as an extension of our psyche into the psyche of others, which is why over the years many important insights into the digital realm have been offered by psychoanalytic thinkers (Akhtar, 2013; Balick, 2013; Holland, 1996; Turkle, 1995, 2012; Whitty & Carr, 2006).

## WALKING A MILE IN ONLINE SHOES: INDIVIDUAL DIFFERENCES AND SUBJECTIVITY

Ed Katkin, my mentor in graduate school, once told us that there are two types of researchers: lumpers and splitters. Lumpers use statistical methods to study groups of people, ideally in carefully designed experiments that determine cause-and-effect relationships. The aim of this type of research is to discover general principles that apply to everyone, or at least to most people.

Splitters are more interested in *individual differences*, in how people compare to each other. They embrace the fact, which everyone knows, that no two people are exactly alike. They feel inspired by how the lumpers always find at least some exceptions to their research findings. By studying in depth these individual differences, splitters discover the intrinsic diversity in human psychology. They attempt to detect patterns and themes in that diversity, or to classify people into types, while recognizing there will always be exceptions. If you react to a situation in cyberspace in some particular way, you can be sure you are not alone. Others react that way too, although their reactions might be a bit different from yours. Splitters are interested in how people's experiences are similar while realizing that any particular experience is part of a complex, unique individual.

For these reasons, splitters such as myself focus on the subjective experience of the individual person. How do different people feel about their lives in cyberspace? How can we come to see things through their eyes? When addressing such questions, I do not discredit self-report, as some researchers might, even if a person's biases or wishes distort it, because such CAMBRIDGE

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distortions often reveal unconscious motivations that the researcher must investigate to arrive at a more complete understanding of online behavior.

I often rely on the psychodynamic idea of an *experience-near understanding*. When I conduct my research, I remain as close as possible to the actual, concrete experience of the person rather than abstract interpretations of it. When I write about what I discover, I rely less on abstruse technical language while concentrating more on descriptions that can be understood in everyday terms. If you are an academic researcher, you will see how I express our theories in a way everyone might comprehend, a challenge that often tests whether we truly understand those concepts, whether they actually make any sense, or whether we are simply hiding behind psychobabble. When I do delve into technical discussions, I hope it gives readers who are not professional psychologists a chance to see how we think. I encourage you to read this book to find those ideas that make sense to you, that feel valuable to you, and then develop from there.

### INSIGHTS WITHOUT NUMBERS: QUALITATIVE RESEARCH

Research psychologists often measure a behavior under controlled conditions, as in a laboratory, then conduct statistical analyses to determine whether they have arrived at a finding that is significant for the subjects in the study. Early in the history of cyberpsychology, such researchers began developing standards for applying those methods in online studies (Reips, 2002).

Other psychologists, such as myself, took a different approach. Even though rigorously trained in the traditional scientific method, I found myself drawn to such approaches as Whyte's (1943) living within the Italian slums of 1930s Boston as a way to understand their subculture, Rosenhan's (1973) studying psychiatric hospitals by having his researchers get themselves admitted as patients, or my mentor Murray Levine's (1974) proposal of using an adversary model based on law practices as a way to verify research evidence. Taken collectively, these approaches are called qualitative research in which we examine the properties or attributes of people, ideally in natural environments, typically without the use of statistical analyses in a controlled research context. Some of the methods of qualitative research include interviews, case studies, focus groups, field observations, the researcher's own self-examination, and the analysis of logs, documents, photographs, and other visuals. In cyberpsychology, all these techniques can become a very unique form of "ethnographic" or "field research" because the place being studied does not necessarily require travel to and