I. A theoretical model of optimal experience

1. Introduction

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Some ten years ago the first publications reporting studies of what we have called the "flow experience" appeared in print, beginning with an article in the *Journal of Humanistic Psychology* and then the book *Beyond Boredom and Anxiety* (Csikszentmihalyi 1975a, 1975b). In the relatively short span of time since those unheralded beginnings, scholars in a variety of disciplines have found the concept of an optimal state of experience theoretically useful. A great amount of research has accumulated during the decade, and some of the results are now being applied in educational, clinical, and commercial settings. *Flow* has become a technical term in the field of intrinsic motivation. This introduction briefly reviews the events related to the development of this concept, and the rest of the volume presents some of the most representative and important contributions to the study of the flow experience during these crucial initial years.

The prehistory of the flow concept: before 1975

I was led to investigate the range of experiences that eventually became known as *flow* by certain observations I had made in the course of my doctoral research with a group of male artists (Csikszentmihalyi 1965; Getzels & Csikszentmihalyi 1976). The artists I studied spent hour after hour each day painting or sculpting with great concentration. They obviously enjoyed their work immensely, and thought it was the most important thing in the world. Yet it was quite typical for an artist to lose all interest in the painting he had spent so much time and effort working on as soon as it was finished. As long as he was at work on a canvas, the artist was completely immersed in the painting. It filled his thoughts for twenty-four hours a day. Yet as soon as the paint was dry, he usually

stacked the canvas in a distant corner of the studio against a wall and promptly forgot it.

Few artists expected any of their paintings to make them rich or famous. Why, then, did they work so hard at the easel – as hard as any executive hoping for a raise or a promotion? None of the extrinsic rewards that usually motivate behavior seemed to be present. Money and recognition appeared to play a minimal part. The object itself – the finished work of art – held few attractions once it was finished. So what accounted for the deep fascination that painting had for the artists?

The deterministic metaphysics underlying modern science suggested that there must be an answer (Popper 1965, p. 61). Regularities in human behavior don't just happen by chance. They are either caused or they have reasons. In psychology, the most widely held causal explanation for why artists paint is some variant of the notion of "sublimation." They enjoy painting, according to this explanation, because it is the closest socially acceptable symbolic expression of the artists' true desires, which are repressed instinctual cravings. But if one observes artists at work for any length of time, the sublimation hypothesis wears thin fairly soon. There is just too much genuine excitement and involvement with the emerging forms and colors to explain it all in terms of a substitution for something else. And why does the artist typically keep seeking ever more complex challenges, why does he constantly perfect his skills if the whole point is to experience vicariously the simple forbidden pleasures of his sexual programming? Up to a certain point sublimation as a cause might be a useful proposition. A few of the artists seemed to have begun painting partly to resolve an Oedipal tangle, or even earlier repressions. But whatever the original cause might have been, it was obvious that the activity of painting produced its own autonomous positive rewards.

Nor were these rewards something that artists expected to achieve after the activity was completed. The usual reason for actions that are not driven by causes is the expectation of reaching a goal-state that acts as a reward for the action. But the reason for painting did not seem to be the usual desire to achieve external goals. That suggested that the reasons might be within the activity: that the rewards of painting came from painting itself.

In the mid-sixties, when these observations were being made, few psychologists were as yet interested in intrinsic motivation; the ruling paradigm was still exclusively focused on explaining behavior in terms of extrinsic rewards. One of the few exceptions was Abraham Maslow.

His distinction between *process* and *product* orientations in creative behavior, which led him to identify "peak experiences," was the conceptual framework closest to the phenomena I was trying to understand (Maslow 1965, 1968). He described people who behaved like the artists in my study: people who worked hard not in order to get conventional rewards, but because the work itself was rewarding. Maslow ascribed the motivation to a desire for "self-actualization," a need to discover one's potentialities and limitations through intense activity and experience.

Maslow's explanation was compelling, but it left many questions unanswered. For example, could any kind of process – or activity – give intrinsic rewards, or only a few chosen ones, like the making of art? Did all intrinsically rewarding experiences *feel* the same; were the intrinsic rewards from art the same as those one gets from sports, or from writing poetry? Did all people have the same propensity to be intrinsically motivated, or did one have to be born an artist to enjoy the making of art? Maslow's pioneering work, primarily idiographic and reflective in nature, did not explore very far the empirical implications of these ideas.

Still intrigued by the question of intrinsic motivation, I turned to the literature on play in the hope of finding an explanation. A substantial body of thought had been developing about the play of children (Piaget 1951; Sutton-Smith 1971) and of adults (Huizinga [1939] 1970; Caillois 1958; Sutton-Smith & Roberts 1963). Play is clearly intrinsically motivated. Whatever its evolutionary significance and adaptive value might be (Beach 1945; Bekoff 1972, 1978; Fagen 1981; Smith 1982), people play because it is enjoyable. My contribution to this literature in the late sixties was an article describing the historical changes in the way rock climbing has been practiced and experienced (Csikszentmihalyi 1969), and an embryonic model of the flow experience developed with H. Stith Bennett, who at that time was a student at Lake Forest College (Csikszentmihalyi & Bennett 1971).

By the early seventies, research on intrinsic motivation was gathering momentum at a few universities. The theoretical justification for this movement can be traced in part to D. O. Hebb's (1955, 1966) "optimal arousal hypothesis" that was extensively studied by Daniel Berlyne and J. McV. Hunt, among others (Hunt 1965; Berlyne 1960, 1966; Day, Berlyne, & Hunt 1971). This hypothesis was a way to account for laboratory experiments showing that even rats did not work exclusively to get food or to avoid shocks, but were also motivated by novelty, curiosity, and competence "drives" (Harlow 1953; Butler & Alexander 1955; White

1959). If any new stimulus could start complex exploratory behavior on the part of a monkey or a rat, this meant that the days when a few basic drives could account for everything an animal did were over. Among the influential statements that have supported this position were the volume edited by Fiske and Maddi (1961), the theoretical article by Dember (1974), and the review by deCharms and Muir (1978).

The first generation of researchers to focus directly on intrinsic motivation included Richard deCharms (1968, 1976), who earlier had investigated the achievement motive with David McClelland. His review of the literature on social motivation almost a decade ago (deCharms & Muir 1978) helped put the concept of intrinsic motivation on the intellectual agenda of psychologists. In his research, deCharms found striking differences among schoolchildren in terms of whether they did or did not feel in control of their lives. He called the first type "origins," because they believed that what they did was what they wanted to do; and he called the second type "pawns," because they felt that they were just being pushed around by outside forces. An important characteristic of the "origins" was their intrinsic motivation: Since they felt they owned their behavior, they took it more seriously and enjoyed it regardless of outside recognition. Indeed, deCharms hypothesized that in contrast to what drive theories might predict, if people were rewarded for doing things they had initially chosen spontaneously, their intrinsic motivation to do them would decrease.

At the University of Rochester, Edward Deci tested deCharms's prediction (1971, 1972, 1975). He found that if people were given money for doing things they enjoyed, they lost interest in those things faster than when they were not rewarded. Deci agreed with deCharms that under such conditions people came to see their involvement in the activity as being instrumental, controlled by external forces rather than freely chosen. Recognition of the reality of intrinsic motivation led Deci and his colleagues by an inevitable logic to investigations of autonomy and self-determination (Deci & Ryan 1985).

Mark Lepper's team of researchers at Stanford University discovered intrinsic motivation at about the same time. They were influenced by the social psychology of Heider (1958) and Kelley (1967, 1973), which ascribed greater importance to causal attributions than earlier cognitive theories of motivation had, and by the self-perception theory of Bem (1967, 1972), which assigns a similar autonomous power to the self construct. Studying children engaged in play activities, Lepper's team replicated and refined the overjustification findings, specifying the

conditions under which rewards interfere with behavior, and thus clarifying the dynamics of intrinsic motivation (Lepper, Greene, & Nisbett 1973; Greene & Lepper 1974; Lepper & Greene 1975). The literature on this topic was summarized in a volume appropriately entitled *The Hidden Costs of Reward* (Lepper & Greene 1978).

Thus by the early seventies there seemed to be enough of a theoretical rationale for believing that people were motivated to act by a much wider range of rewards than traditional psychology had suspected, and that many of these rewards were not based on prewired consummatory or homeostatic principles, like eating, having sex, or avoiding pain. But demonstrations of the importance of intrinsic rewards were still based on rather restricted laboratory settings, in which the behavior of small children was observed according to a few fixed experimental paradigms. Very little was known about intrinsic motivation in natural settings. No one knew whether the deep involvement artists experienced at their easels was a common occurrence among adults in other walks of life, and whether that involvement was the manifestation of an underlying experience so enjoyable as to be a reward in its own right.

The slowly cumulating research on intrinsic motivation differed from my own interests in another important respect. Lepper, Deci, deCharms and the other researchers in the field were interested primarily in intrinsically motivated *behavior* – in what made it happen and what its consequences were. They were inducing intrinsically motivated performance in laboratories, but they were not concerned about how the person so motivated was feeling. They were prepared to accept the existence of intrinsically motivated experience without wishing to know what it was; what they wanted to know was how it affected the subjects' task persistence or creativity. Although I, too, was interested in these issues, my first concern was about *the quality of subjective experience* that made a behavior intrinsically rewarding. How did intrinsic rewards *feel*? Why were they rewarding?

In order to answer these questions, I and my students, first at Lake Forest College and then at the University of Chicago, interviewed in depth over two hundred people who presumably would be familiar with intrinsic rewards. These were individuals who spent great amounts of time in strenuous activities for which they got no money and little recognition. They included amateur athletes, chess masters, rock climbers, dancers, high school basketball players, and composers of music. Basically what we wanted to find out was how such people described the activity when it was going particularly well.

The results of those studies constitute the first coherent statement about flow (Csikszentmihalyi 1974, 1975a, 1975b). They will not be summarized here, since a more systematic presentation of the flow model will be given in the next chapter. Their major contribution was to identify, across the widely diverse activities, a common experience that the respondents felt was *autotelic*, or rewarding in and of itself. Eventually we came to call this experience *flow*. The term had been used as a metaphor by some respondents to describe their feelings while involved in their favorite activities, and the short Anglo-Saxon word seemed preferable to the more clumsy, if more precise, term, *autotelic experience*.

After describing how it felt to be in a situation that was intrinsically motivating, we went on to explore the characteristics of those activities that provided intrinsic rewards. Again, despite the obvious difference between such endeavors as climbing rocks and writing music, a common set of structural characteristics was found to distinguish those patterns of action that produced flow from the rest of everyday life. The major implication of this aspect of the study was that not only play, leisure, or creative pursuits such as painting make flow happen. Intrinsic rewards can be built into any activity, including work.

The second decade: after 1975

The publication of *Beyond Boredom and Anxiety* did not attract much attention at the time, but the ideas contained in it slowly worked their way into a wide variety of academic and practical settings. The book has been reprinted three times so far, and it has been translated into Japanese (1979) and German (1985).

The most immediate impact was on those scholars who study the psychological and sociological implications of free time – on the literatures of play, sports, leisure, and recreation (e.g., Widmeyer 1978; Pearson 1979; Sutton-Smith 1979; Iso-Ahola 1980; Kleiber 1980, 1981, 1985, 1986; Kleiber & Barnett 1980; Egger 1981; Neulinger 1981a,b; Kelly 1982, 1986; Ingham 1986; Samdahl 1986). Several dissertations tested the concept and applied it to different populations. For instance, Gray (1977) developed a flow questionnaire and found it useful with a sample of older retired persons; Progen (1978) developed a questionnaire to be used in a variety of sports, as did Begly (1979) and Adair (1982).

To these fields the flow concept contributed one important insight: From the perspective of subjective experience, work and play are not

necessarily opposites. In order to define leisure, the quality of the experience might be a more valid guide than the nature of the activity. Many people derive greater rewards from their jobs than they do from free time. For them the traditional distinction between "work" and "leisure" makes little sense. If a person enjoys selling cars more than bowling, which activity is work for that person, and which leisure?

Cultural anthropology is another field to which the concept of flow turned out to be relevant. Here it was Victor Turner (1974b) who saw the similarity between the flow experience and a series of phenomena he had been studying for years, the so-called liminal situations. In a great variety of cultures, Turner found, normal social roles are occasionally suspended or even reversed in well-defined ritual situations. Some examples are rites of passage, pilgrimages, or more secular institutions like the carnival or the Christmas office party. The reason for having these reversals, according to Turner, is that while they last they provide participants with a feeling of *communitas*, an emotionally rewarding closeness comparatively free from the constraints of social roles and responsibilities. This feeling of participation in turn helps to cement the bonds of social solidarity after the episode ends.

Following Turner's lead, the flow concept became an influential idea in the anthropology of play (Cheska 1981; Harris & Park 1983). For instance, at the 1987 meeting of The Anthropological Association for the Study of Play held in Montreal, a symposium dedicated to flow dealt with the following subjects: the miniature world of chess in Washington Square Park in New York City (Francis 1987), a study of the emotional consequences of risk and competition (Hilliard 1987), a comparison of the flow theory with the Taoist philosophy of Chuang-tzu (Sun 1987), and an analysis of flow in television reporting (Zelizer 1987).

The similarity of flow to experiences reported in mystical and other religious contexts was also apparent (Carrington 1977). Therefore Mircea Eliade, who had accepted the task of editing a new *Encyclopedia of Religion* for the publishing house of Macmillan, commissioned for it an article on the flow experience (Csikszentmihalyi 1987a).

Early criticism of the concept had focused on its supposedly Western bias. Although its development had been influenced by Eastern sources such as the *Bhagavad Gita* and Zen, some critics felt that flow was too active and goal-directed a process to represent a panhuman, species-specific trait. In response to this criticism, the argument in favor of the universality of flow is that the specific *content of the activities* producing

flow vary from culture to culture; in the West, flow activities might indeed be on the whole more active, competitive, and controlling than in other parts of the world. But the *dynamics of the experience* that make enjoyment possible are presumably the same regardless of the culture. Several of the chapters in this volume support this argument. The studies of Sato with Japanese teenagers, of Han with Korean elderly, and of Massimini and his group with various European and Asiatic populations illustrate quite conclusively that the parameters of enjoyment are the same the world over.

Because flow occurs within the privacy of a person's consciousness, its implications for the discipline of sociology have been largely ignored. In an early review, Murray Davis (1977) compared the studies on flow with the work of the great sociologist of everyday life Erwing Goffman (calling both of us mystics; but, the reviewer observed, whereas Goffman is a *pessi*mystic, I am an *opti*mystic). One sustained application of the flow concept to sociology was Richard Mitchell's book on mountain climbers (Mitchell 1983), a section of which appears as Chapter 3 in this volume. As Mitchell's work suggests, despite its subjectivity, flow might contribute to the understanding of many problems central to sociology. After all, alienation and anomie, two of the conceptual pillars of that discipline, are also subjective phenomena.

In the field of psychology, where the flow concept seems to belong more naturally, the impact has been proportionately greater. A fair amount has been written on flow as a useful idea, as an interesting phenomenon, and as a potentially important aspect of human life. One of the fields in which the impact of the concept has been substantial is the recently evolved literature on happiness or subjective well-being. In this line of investigation, the flow model is usually seen as the leading activity-based theory of happiness, often traced back to Aristotle's views (Diener 1984; Diener, Horwitz, & Emmons 1985; Argyle 1987). In comparison with the conceptual impact, the yield of empirical studies has thus far been rather meager. There have been exceptions, of course; some of the most noteworthy ones are included in the present volume.

As one would expect, researchers working in the field of intrinsic motivation became interested in the studies of flow primarily because for the first time the phenomenon was being looked at in natural settings (deCharms & Muir 1978; Amabile 1983; Deci & Ryan 1985). In the realm of more general psychological theory, Eckblad (1981) has tried to integrate flow with other motivational and cognitive models in a systematic fashion. In Germany Heinz Heckhausen has investigated the relation-

ship between achievement and intrinsic motives, with special reference to flow (see Aebli 1985).

Examples of laboratory studies influenced by the flow concept are the neurological investigations of Jean Hamilton, who found intriguing attentional patterns associated with the intensity of flow experiences (Hamilton 1976, 1981; Hamilton, Holcomb, & De la Pena 1977). Mannell (1979; Mannell & Bradley 1986) has conducted social-psychological experiments focusing on flow and other motivational concepts.

In our own laboratory at the University of Chicago, research on flow has become an integral part of every investigation being conducted. Thus the study of how urban Americans create a symbolic environment in their homes, reported in the volume *The Meaning of Things* (Csikszentmihalyi & Rochberg-Halton 1981), includes a chapter on flow. So do the study of teenage experience reported in *Being Adolescent* (Csikszentmihalyi & Larson 1984) and the study of television-viewing patterns contained in *Mirror of the Mind* (Kubey & Csikszentmihalyi, in press).

Perhaps the most interesting conceptual implication of flow has been in terms of a theory of sociocultural evolution. The link between a psychological selective mechanism, obeying its intrinsically motivated goal-seeking tendency, and cultural change was first perceived by Professor Fausto Massimini of the University of Milan. Our first article on the subject (Csikszentmihalyi & Massimini 1985) stimulated a vigorous debate that occupied much of three consecutive issues of the journal *New Ideas in Psychology* (1985, vol. 3, no. 2, 3; 1986, vol. 4, no. 1). Even earlier, J. Crook, the British ethologist, had perceived the evolutionary significance of flow in the concluding chapter of his *Evolution of Consciousness* (Crook 1980). Implications of the flow model for creativity and cultural evolution were more systematically explored in Csikszentmihalyi (1986, 1987b). A fuller treatment of this link may be found in Chapter 4.

Practical applications. The flow concept was developed as a result of sheer curiosity. It was the fruit of "pure" research, motivated only by the desire to solve an intriguing puzzle in the mechanism of human behavior. And, as many early critics were to point out, it was very ethereal, bordering on the mystical. It lacked the hard, concrete objectivity that a pragmatic psychological concept should have. Considering all this, it is in many ways astonishing that so many practical applications have been found for it.

One of the first arenas in which flow was seen to be potentially useful