The telecommunication revolution in the USSR is creating structural change in the culture, encompassing media, societal, and ideological systems. In the process, it is replacing traditional Soviet collectivist values with individualist, western values. Increasingly easy access to western ideas through VCRs, direct broadcast satellites (DBS), and home computers has led the Communist Party to restrict access to all but Soviet ideas through these media, although not entirely successfully. On the black market, Japanese VCRs and western films outsell the poorly made Soviet VCRs and limited selection of tapes. Estonians are also able to receive Finnish broadcasts of American television programs, which the Soviets have attempted to control with "prior consent" agreements with the West concerning satellite broadcasts. The most pressing problem, however, lies with the Soviets' need for computer literate citizens who will not undermine propaganda and information control by connecting with non-Soviets through telephone-linked computer systems. Kenneth Burke's "pentad" model illustrates how the communication technologies can act as a change agent upon the Soviet media system and larger society, with the "zi\textsubscript{lt}" being the Soviet government, Soviet society the "scene," and the desire to compete with western technology the "purpose." Whether the new technology can be kept under control is a pressing question for Soviet leaders, a problem which could, conceivably, cause another October revolution. (Thirty-six references and a diagram of Burke's "pentad" model are included.) (JC)
AN ENIGMATIC EMBRACE: PROBLEMS OF REGULATING THE EFFECTS OF NEW COMMUNICATION TECHNOLOGIES IN THE SOVIET UNION

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Abstract

This study considers the effect of the new communication technologies (Video Cassette Recorders, Direct-Broadcast Satellites and Personal Computers) on the Soviet media system and society. Through the use of a Burkeian methodology, it is concluded that these technologies will encourage the de-centralization of governmental power in the USSR.
AN ENIGMATIC EMBRACE: PROBLEMS OF REGULATING THE EFFECTS OF NEW COMMUNICATION TECHNOLOGIES IN THE SOVIET UNION

According to Russian historian Basil Dmytryshan, the Soviet Union is an enigma (ix). At once, it is both a conservative, backward country and one that sees itself as a revolutionary model for other countries (particularly in the developing world) to follow. It is a society in which the abacus and the computer co-exist in a milieu of paradoxical proportions. It is a society in which the employment of the printing press was limited to the printing of routine government documents and not to the dissemination of new ideas, as was done in the west (Starr 40). Conversely, V. I. Lenin is credited as the first world leader to seize upon the possibilities of radio broadcasting as an agent of revolutionary change (Guback & Hill 42). Today, the Soviet Union is particularly feeling the strains extant between its desire to become a first-world participant in the telecommunications revolution, and thus partaking of its many fruits, while simultaneously expecting to ideologically control new communication technologies by counter-acting against their inherent tendency of encouraging structural decentralization of the media system and individualization on the societal level. It is this paradox of control versus liberation in the adoption of new communication technologies that is the focus of this paper.

Specifically, the writer will argue that the advent of
the telecommunication revolution in the USSR is creating a process of structural change in the culture, encompassing media, societal and ideological systems. In the political and cultural areas of life, the new communication channels are undermining traditional Soviet collectivist values and replacing them with individualist, western ones. This sea-change among their citizen’s value-structures are causing responding shifts in the political leadership of the Soviet Union, both physically and philosophically (Starr 43-5). The old Stalinist tradition of governance has given way to more subtle means of coercion since the mid-1950s, to be sure, but the advent of the "post-industrial society" in the 1980s suggests that the future leaders of the USSR will have to contend with forces that will frustrate their autocratic designs (Economist 1-18S; Christian Science Monitor June 12, 1985:1+; CSM Nov. 21, 1986:1+). The technological imperatives of the new communication media (especially VCPs, DBS, and personal computers, but also miniaturization that encourages the wide diffusion of communication hardware) will, the writer believes, allow for the gradual decentralization of political control within the Russian culture, a process that has no historical parallel in Soviet history (Dmytryshyn 14-38).

The theoretical basis for this study is the seminal dramatistic advance developed by Kenneth Burke the "pentad." By the employment of this organic and dynamic structure of analysis, social/technical interactions in the USSR can be
analyzed on both the mass media system and societal levels, simultaneously. Tensions between opposing drives, both on the social and individual planes can also be detailed within the model.

A Description of Scene: Development of the Radio and Television Broadcasting System in the USSR

According to Guback and Hill, the development of radio broadcasting in the Soviet Union can be directly credited to the early and vigorous promotion of the medium by the father of the Russian revolution, V. I. Lenin (5-11). He referred to radio broadcasting variously as "the loudspeaker of the Revolution"; "a newspaper without paper and 'without distances'," conceiving of it as a monological communication device, disseminating the word of the Communist Party of the Soviet Union (CPSU), which, according to Marxist-Leninist political theory, was to single-handly promulgate rules for the new state (Ibid.). Lenin thereby considered centralized control of the press system to be a given, in that "freedom of the press" was in reality

... 'freedom for the rich, the bourgeoisie to deceive the oppressed and exploited masses... Is it possible to fight this howling evil and how? The means is state monopoly of private advertising in newspapers. [Also] State authority in the name of the Soviets will take [control of] all printing plants and all paper and distribute them justly, first to the government in the interests of the majority of the people (Hopkins 55-6).
Not surprisingly, Lenin believed likewise that such a centrally-controlled, Bolshevik radio broadcasting system could assure the survival of the nascent Soviet state, due to its tendency to ubiquitousness and to the fact that it could reach and motivate illiterate workers and peasants. (The USSR in 1917 was a feudal and backward country, in which most of the people were unable to read or write (Dmytryshyn 35).) In such a state, radio was seen by Lenin as a more effective collective propagandist, agitator and organizer [for development] than the printed word (Guback & Hill 42). Like many a developing country today, the broadcasting medium in the early Soviet state was seen as a vital part of that society's infrastructure. However, both difficulties in manufacturing transmitters and receivers and the general shortage of electricity (especially in rural areas) prevented radio from becoming a true mass medium until the 1940s. (This was despite the early beginning of regular broadcasting from Moscow in 1922.) As Mark Hopkins states:

By 1928, there were only 92,000 receivers in the whole Soviet Union, and all of them [were] in cities where only a sixth of the country's population lived. The following decade witnessed a relatively spectacular advance, the number of operating receivers reaching 7 million by 1940. Broadcasting stations... numbered 22 in 1929,... 60 in 1932, [and] to 90 stations in 1937] (246). The growth of radio broadcasting was also hindered, according to Hopkins, by Lenin's view that radio was a
supplement to newspapers. Lenin had stated that with radio "all Russia will hear a newspaper read in Moscow" (Guback & Hill 16). This attitude, once entrenched in the bureaucracy of the Soviet state, made it difficult for the system to adapt to changing conditions and audience desires, argues Hopkins (245). Despite this fact, by the eve of WW II, the Soviet state had a "formidable mass media system," states Hopkins, primarily due to Stalin's frantic industrialization drive during the 1930s (98).

In the post-WW II period, television broadcasting developed more rapidly than radio had, due to the existence of the necessary industrial infrastructure. According to Burton Paulu, early experiments with TV broadcasting occurred in 1931, with regular transmissions beginning in 1939. After the war, the present 625 line system was adopted, with daily transmissions commencing in 1955. Satellite relaying of domestic TV broadcasts was made possible with the launch of a "Molniya" series transponder in 1965, and color transmissions began in November 1967 (Paulu 37).

Even with the advent of television, the adoption of sophisticated audience measuring techniques was slow, due to ideological restraints. Stalin, in particular, had been adamant in his opposition to the use of "bourgeois" social science methods in ascertaining the effectiveness of Party propaganda media efforts. (Indeed, it was not until the later part of Khrushchev's tenure [the early 1960s] that the
Soviet broadcast system began to realize the importance of employing audience research data in making programming decisions, according to Mickiewicz (Journal of Communication 97). Similarly, the tension extant between the need to adapt the radio/television broadcast services to the various needs of the 15 union republics, 19 autonomous republics, nine regions (oolasts), 123 territories (krays) and ten national areas (okrugs) that cover 11 time zones and whose inhabitants are from over 75 nationalities and speak over 100 languages, and yet retain central party control over the message content broadcast was omni-present during Stalin's 'ule, and remains, in muted form, today (Dmytryshyn 1-12, Paulu). On one hand, CPSU officials have proclaimed throughout the years that the central governing characteristic of Soviet broadcast media is its "mass character," promoting the national unity of the Soviet communist state (Paulu 94-5). (In 1972, then head of the State Committee for Radio and Television, S.G. Lapin, stated, "the Party uses television and radio as a rostrum from which to make a direct appeal to the entire Soviet people" (96).)

Despite this ideological demand for centralized control of message content, however, there has also been the realization by party leaders that the monological political message needs to be adapted so that the ethnically-diverse people who heard it would understand and accept it. In earlier times, this adaptation meant simply that the local language and socio-political concerns of the audience needed to be taken
into account. Today, it means that ideological messages have
to be buried in a fair amount of entertainment programming
(Mickiwieicz Media and the Russian Public 45). In addition,
the Soviet electronic media system will have to adapt to
increasing competition from other information sources, and
not only the program offerings of video-recordings and
pirated pop music tapes already present, but also with the
possibility of future DBS transmissions from abroad and
telematic personal computer hookups. These new media
 technologies will not only create tensions within the media
system, but in the political arena as well. It is the
proposed effects of these new technologies on the Soviet
media structure that will now be discussed.

Agent of Diffusion in Audience Conception:
the Impact of VCRS on the Soviet Broadcast System

With the rising of living standards in the USSR in the
post-war era, there has not only been persistent demands for
more material consumer goods on the part of the Russian
public (including media hardware radios, HI-FIs, and
televisions) but also a demand for more programming choices
on the airwaves. The "mass" character of the broadcast
audience embraced by Party officials no longer satisfied
audience demands. As Paulu pointed out, in a 1967 survey of
television viewers in Lennigrad, only 37 per-cent of the
1,916 individuals surveyed said they were satisfied with the
quality of news programming on television (117). This same
survey also demonstrated that most of the respondents preferred entertainment programming on television, using the medium as a means of "escape" (186). Taking into account the tendency of Russians to give "over-positive" responses to questionnaires, these figures can be considered to be conservative (Paulu 192, Mickiewicz Media and the Russian Public 6-9). As Paulu concludes:

Combining the data from [such] surveys, reports from correspondents and other foreigners in the USSR, and conversations with Soviet citizens, my conclusion is that the general public does not hear or watch with enthusiasm, or accept uncritically, the heavy propaganda output of the Soviet media. As one Soviet citizen put it to me, after a hard day's work the public wants escape and relaxation, and these the electronic media do not provide [enough of] (194).

The Soviet government has attempted over the years to improve program quality and variety. In the main, most government studies on media programming throughout the '60s and '70s lamented the dull sameness of much television and radio programming (Paulu 194-5). Officials now recognize that programs need to be tailored to the specific needs and interests of a particular audience member. "A program for onion raisers 'is hardly of much interest for a salesgirl in a haberdashery.'" an Izvestia columnist observed in 1960 (Paulu 194). Today, this observation is standard broadcasting policy. Speaking about the preparation of programming for the "Mayak" radio channel, senior editor
Marina Shmekova states "You can't prepare a broadcast with just the average listener in mind . . . You've got to work around a specific audience. Our programming [for instance] is geared to listeners at home" (Basova 26). Concerning news programming, there has been criticism in the Soviet press of late, complaining of superficiality and a lack of immediacy on the part of "Vremya" ("Time"), the all-union, all-channel news broadcast. Writing in Pravda on May 19, 1986, Dmitry Lyubosvetov observed:

[Due to Party efforts] the importance of television has increased significantly. Public affairs journalism is gaining more structure every year . . . However, I think there is no reason for self-deception as to quantitative sweep . . . when "Time" is on the air, the viewer has no choice—the program is on every channel. This would seem to be correct, since it emphasizes the significance of news of nationwide importance. But [under such conditions] the responsibility of television journalists for its high quality increases many times over. The audience reacts sharply and critically to any lowering of the criteria of public-affairs journalism . . . Viewers expect more from the "Time" program than they are getting so far (CDSP 38:20,9).

What media challenges have caused the Soviet leadership to so critically assesses its programming policies? In earlier days, a major challenge to Soviet radio programming was foreign shortwave broadcasts, whose wide reception was made ironically possible due to the technological and geographical demands on the domestic radio broadcasting structure, and the resulting decisions made. (In the Soviet
Union, much internal radio broadcasting is done on short-waves, particularly in serving more remote areas of the country.) Hence, by the 1950s, many people owned all-wave sets, and used them to listen to foreign broadcasters, (especially the BBC, VOA, Radio Liberty and Radio Free Europe) despite jamming efforts and legal restrictions by the Soviet government (Paulu 80, 196-215). In fact, the number of radio receivers had reached such a number by 1962 that the authorities stopped collecting license fees on them (Paulu 52). Programs listened to on these foreign stations are often taped on cassette recorders (which have a large diffusion in the USSR) and passed along, with those programs broadcasting western popular music being especially popular (Shanor 80).

The increasing demands for variety in programming options was accelerated by the development of home video-tape recorder technology in the late 1970s and into the '80s. Japanese VCR machines are hot items on the black market, despite their excessive cost (about 5000 dollars) (Business Week 40). Today, it is estimated that there are from 250-300 thousand of such VCRs in the USSR (Yasmin 1). Of course, the tapes being shown on these machines are also of Western origin. (Recent tapes of "Rambo" and "Rocky" movies, which are banned by the Soviet government due to their "anti-Russian bias," are selling for over 300 roubles, which is more than an average worker's monthly salary (Branson 16).) Other popular black-market tapes include such items as
"The Godfather," James Bond movies, Wonder Woman, and music videos by Duran Duran and Boy George (Ibid.). What Soviet government officials worry most about, according to Branson, is that the centralized, carefully-crafted propaganda efforts by the Gorbachev regime will be counter-acted among domestic audiences by such individualized, unchecked access to US and British video productions (Ibid.). (Research by Don Le Duc suggests that people who obtain their entertainment programs via VCR become more critical of off-air news programming, thus confirming the rationality of this fear (390).)

Despite this fear of VCR technology as an agent of undesirable change, the Soviet government in 1984 decided that it could not effectively stem the move towards a "video culture," by punitive action alone, so they attempted to cater to it instead, hoping to channel the new medium into the service of socially-approved ends (Yasman 1). In light of this policy, a domestic Russian VCR model was put into production (the "Elektronika VM-12") and some limited numbers of Soviet-produced animation and dramatic video features have been offered for sale. However, this effort to wean Russian video users from imported machines and videotapes has not been very successful. First of all, the VM-12 machine is not of either a "Beta" or "VHS" standard, so Western tapes cannot be viewed on them. Secondly, both the limited numbers of machines manufactured (about 75 monthly) and their low quality have not encouraged sales of the 1500 dollar item (Business Week 40). Due to the failure of this
government-sanctioned effort to reduce the black-market trade in Western video material, conflict has broken out among the ruling elites on how to deal with the problem. One viewpoint expressed suggests that the authorities should "crack down" on the production and distribution of unsanctioned videos, and equate such behavior with "ideological subversion," in that even "pure entertainment" movies from Western sources are held to possess a corrupt ideology by the CPSU faithful (Yasman 1; Kanovalov; Shanor 157). Such a move would make the sanctions for possession of such defined material severe. On proponent of such a policy is Veronika Kononenko, who wrote in the Chelovek i zakon:

The tenacles of [western] cultural imperialism are stealing up to our borders. The masters from across the ocean, having seduced their own citizens, are trying to throw the dirty video lasso over us. . . . We need to be especially on our guard in order to expose in time those who trade in inferior Western video material, who are in essence engaging in ideological subversion. . . . In my opinion we were in a hurry [to attempt to sell domestic VCRs]. And this decision should be reconsidered—[such a move will] reflect the opinion of those whose daily business it is to uncover and put a stop to the video poison (qtd. in Yasman 4-5).

Analyst Yasman suggests that if it were not for the article's contemporary subject matter, this retrogressive view "could have easily appeared in the spring of 1952 and be ascribed to the pogrom style of that time" (4). Such crude and xenophobic views are not going unchallenged in the
Russian press, however. In an article published in the
Zhurnalist in May 1986, art critic Vsevolod Vil’chek,
according to Yasman, "openly ridicules" the position of
Kononenko and other Soviet conservatives, calling their
response 'typical of an unthinking, negative interpretation
of foreign experience' (Yasman 5). Vil’chek suggests that
the video culture can be "collectivized" if it is channeled
to good ends, according to Yasman. Vil’chek concludes:

Of course we are lagging behind with videos ... but do we need to catch up? Video is, after all, only technology, which increases the possibilities for good or evil to an equal degree (qtd. in Yasman 6).

In short, Vil’chek is arguing that video technology
cannot be denied, but needs to be adapted to collectivist ends. If this social design for VCR use seems implausible in light of the individualistic employment that that technology is being put to at present in the USSR, a far greater threat to centralized media control is posed, literally and figuratively, on the horizon. That new agent of change is the Direct-Broadcast-Satellite or DDS.

Satellite Technology in the USSR:
A Tension Between Necessity and Threat

In the Soviet broadcast structure much use is made of satellite technology. As Paulu has noted, because of the
broad geographical expanse and a high proportion of sparsely-populated remote areas that need to have access to broadcast services in the USSR, comsats have been the new distribution technology of choice for Soviet broadcasters. Comsats are required to distribute broadcasts overland in that Russia lacks a systematic cable and microwave ground network to link the country (77). As of 1975, the telecommunication links extant were provided by a series of "Molniya" satellites, supplemented by newer "Raduga" and "Ekran" model comsats and linked to earth networks by 70 ground stations (Great Soviet Ency. 464; AV Week 120:59).

Starting with the "Molniya 2" series, launched in 1971, it has been possible for the Soviets to inter-connect with the Western INTELSAT system. This was an interesting move on the Soviet government's part, in that they had refused to become a member of INTELSAT at its formation in 1971, but instead had formed their own comsat consortium (Intersputnik) with other Eastern-block nations (Paulu 78). The USSR has been a non-member user of INTELSAT since that time, but is now negotiating with INTELSAT member countries about the possibility of becoming a full member of the consortium (AV Week 122:26). Possible reasons offered by US officials for this move is that the USSF include the hopes of gaining access to modern Western communications technology, and also partaking in any future rule-making by INTELSAT (Ibid.).

The major fear that the Soviet government has about international satellite communication advances is the
development of Direct-Broadcast-Satellite (DBS) technology. With such technology, it is possible for individuals to receive satellite TV transmissions directly, without the mediating control of a ground station network. As early as 1972, then foreign minister Andrei Gromyko called for an international agreement to severely limit the use of DBS satellites (Paulu 79). Such an agreement, Gromyko claimed, was necessary in order to:

- protect the sovereignty of states against any outside interference and prevent the turning of direct television broadcasting into a source of international conflicts and aggravations of relations between states... [This proposal should prohibit the transmission of] materials propagandizing ideas of war, militarism, Nazism, national and racial hatred and enmity between peoples, and equally, material of immoral or provocative nature otherwise aimed at interference in internal affairs of other states or in their foreign policy (qtd. in Paulu 79).

This "prior consent" position of the Soviet government on international DBS regulation is, according to Paulu, entirely consistent with earlier Russian positions concerning the banning of foreign publications and the jamming of short-wave broadcasts deemed offensive by the Party. (76) Most specifically, the Soviet government is worried about the possibility that the US government will attempt to begin a VOA or Radio Liberty video service (Christian Science Monitor May 16, 1985:32). (Such a "VOA Europe" service was begun in 1985, but has since been abandoned due to budget restraints
and low European broadcast participation (Media Network 1986). In more general terms, the Russian authorities are fearful that private entrepreneurs such as Rupert Murdoch and Ted Turner will provide popular entertainment programming that will compete with meager official Soviet offerings, and thus undermine Party propaganda. According to writer Donald Shanor, DBS satellites are seen by Soviet authorities as the greatest threat to their control of media channels. Such a challenge will be met by government resistance, Shanor states, even to the extent of jamming or shooting down DBS satellites (3).

A less extreme example of this attempt to control foreign media access is the current Soviet reactions to the widespread reception of Finnish TV broadcasts in the Baltic republic of Estonia. In that some areas of Estonia are only 50 miles from Helsinki, such reception is possible, but a good outdoor antenna connected to the television with coaxial cable is necessary (Connections 32 May 24, 1985:3). Finnish TV is popular with Estonians not only because of its news service (which regularly "scoops" local governmental sources on stories) but also because it carries American prime-time offerings such as Dallas and Dynasty. Also, the 300-500 thousand Estonians who can receive the Finnish broadcasts are also familiar with the Finnish language (CSM April 12, 1986:14). The Russian leadership has never jammed Finnish television broadcasts, however, and is unlikely to do so in the future due to the basically friendly relationship between
the USSR and Finland.

Nevertheless, the Soviet authorities are attempting to prevent the reception of Finnish TV broadcasts in Estonia through internal controls. One method now being employed is the banning of the sale of the coaxial cable needed to deliver the weak signal to from the antenna. Another restriction also being applied is that Finnish communist newspapers are not being sold on Saturday in Estonia. (Saturday is when the Finnish TV schedules are printed.) Another possibility of control being considered by Estonian officials is the adoption of cable TV in the area, with only Soviet programs being offered on it (Connections 32 May 34, 1985:3). Despite this attempt at control, some technically-inclined Estonians are attempting to find out the frequency and coordinates of the Nordic DBS (TELE-X) satellite due to be launched in 1987-8, so that they can construct the antennas necessary to capture any signal "spillover" (CSM April 12, 1986:14; Connections 32 June 21, 1985:3). It is situations involving DBS technology like these that make the Soviet government very anxious about obtaining a strongly-worded international "prior consent" treaty.

According to Stephen Gorove, the torny issue of "prior consent" has complicated the implementation of a 1982 international agreement on the regulation of DBS satellites (2-11). The United Nations Committee on the Peaceful Uses of
Outer Space (UNCOPUOS) has been working on the issue since 1968, and the General Assembly voted in favor in 1982 on "Principles Governing the Use of Artificial Earth Satellites for International Direct Television Broadcasting."

Incorporated in this resolution was strong language favored by the USSR and developing countries on "prior consent," to which the United States and most of its allies did not agree. Gorev states that the difficulty in that the USSR and developing countries have in accepting a more "free-market" regulative approach towards DBS programming is due to the perceived cultural and political impacts of such foreign signals, initiating a process that the receptor countries believe that they will not be able to control (Ibid.). This fact, the USSR believes, gives these countries the right to counter-act such signals. Television, Soviet UNCOPUOS delegate Yuri Kolosov, claimed, is "the most powerful means of communication available, possessing a social impact well beyond that of radio broadcasting." He also claimed that subliminal techniques employed in television production impose ideological perspectives on unwitting viewers (Ibid.).

Gorev suggests that the best way to regulate DBS broadcasting lacking a binding international treaty is through bilateral agreements (10-11). In the main, however, it can be said that the same problematic definitional paradoxes will remain in any negotiations on this issue with the Soviet Union. In can be assumed that the leaders of the USSR will attempt to control such a technological agent of
change like DBS systems by international agreement whenever they can usefully do so.

Telematic Technology: Several Agents of Change Combine to Create a Destabilizing Affect Upon Soviet Society

In discussing the Soviet government's dilemmas in meeting the media demands of an increasingly sophisticated and information-hungry audience, (whether with official broadcasting options or with an enigmatic embrace of video and satellite technology) one needs to realize that the basic causal agent for change lies subsumed to the media system itself. The core technological problem that the Russian leadership is facing is the revolution in the computer sphere. Under General Secretary Gorbachev, there has been a realization that the society faces problems that require far-ranging, structural changes. (According to Christian Science Monitor editor Earl Foell, the Soviet Union suffers from a low 2.5% annual growth rate, low productivity, a looming high-tech arms race, and a decline in easily extracted mineral reserves (CSM March 12, 1985:3).) The Party leadership realizes that computer technologies are indispensible in the tackling of these challenges. Thus, the Party has pushed for the expansion of both computer manufacturing and education. At a special meeting of the Politburo in the spring of 1985, a radical plan to introduce mandatory computer education into the secondary schools was
adopted (CSM May 29, 1985:11). Thus, a Russian copy of the famous "Apple" computer, the "Agat" has been produced for school use; the "Iskra-250" for office employment; as well as a home computer, the "Elektronika BK 0010" (Ibid.; Hanson 1). The goal of the plan is to make a wide segment of the student population computer literate. But problems abound: the production of these computers is, by Soviet accounts, hindered by bureaucratic red-tape; e.g., of the 60,000 schools that are supposed to teach computer courses, only about 1,100 AGAT computers were actually available in the spring of 1985. (Also, many of the teachers of these computer courses had not been able to train on computers themselves! (CSM May 29, 1985:11). Because of such problems, a ministry-level department on computers has been set up in the Kremlin with the task of fostering and coordinating future computer production, both of mainframe and personal computers (Times March 25, 1986.24H. CDSP 38:28,10-11).

These strides towards widespread computer availability and knowledge come with a threat however. After all, it will be difficult for the authorities to keep tabs on all the information produced by the new computers. A word processor teamed with a printer would be a boon to dissident producers of "samizdat" (self-published) documents, for example. It must be noted that CPSU officials are not blind to this threatening aspects of the computer age. The authorities do not intend to lose ideological control of the computer revolution. In fact, as Frederick Starr argues, computers
may well increase the power of the state.

In contrast to the West, the computer in the Soviet Union overwhelmingly remains a producer good. Manufactured or imported by the state and for the state, computers have been used to render the existing governmental and administrative system more effective, not to change it. [For the Party hierarchy] computers have emerged as the last best hope for making the old economy work (42).

This argument of Starr’s seems reasonable as long as computers remain large and thus easy for the government to control. Personal computers pose a challenge to such control, in that their very size encourages a decentralization process. Plans of the Soviet leadership to keep the PC’s output under lock and key include the possibility of keeping printers centrally located under government watch, or of tying all home computers to a monitored mainframe computer (Sharior 150). Problems arise in the fact, however, that a computer hacker, trained to be computer literate, will also be able to defeat or bypass computer monitoring systems. More emphasis will then be required in the ideological training of technologically-sophisticated students due to an necessary move away from direct monitoring and censorship towards an increased reliance upon self-censorship. As the chief of the Soviet Academy of Science Leningrad computer center, Valentin Ponomaryev, suggested, computer games can be employed for "constructive" ends, freeing people from petty thoughts and
allowing them to concentrate "on their spiritual and creative
growth" (qtd. in CSM March 5, 1985:40). This hope of
employing new technology for Marxist-Leninist ends is similar
to those plans mentioned above as per video technology. Such
a focus of Party officials on the educational aspects of
control, and not on the actual policing of undesirable
behavior seems to suggest that they realize that the old
methods of repression will not work in the new technological
age. (Similar realization of this fact in this country have
increased the call here for better education of students in
values and ethics, in order to combat computer crime.)

The most basic challenge to Soviet control of the
information age will, however, occur when non-governmental
personnel are able to tie their computer to a telephone.
This powerful combination of technologies (called telematics)
will open up possibilities for a true decentralization of
power, according to Schiller. Although the telephone system
in the Soviet Union is primitive by US standards (there are 9
telephones per 100 persons in the USSR, versus 75 for every
100 Americans) there are still about 25 million telephones in
service in Russia, with over 1 million domestic
long-distance, and over 2000 foreign calls made daily (Shanor
162). Touch-Tone and electronic switching are in
development, and fiber optical transmission lines are already
being used on a limited basis (Ibid.). In short, the
increasing demand for individual telephone service is forcing
the state's PTT into running the service more like a
commercial operation, and less like a security operation, which has historically been the case (Berenyi 43). As Shanor observes, it is impossible for the KGB to monitor all calls in the USSR today (162).

Such a situation will increase the possibilities for Soviet computer users to connect to each other via modems, and to also interact with non-Soviet computer users abroad. Dissident samizdat writers will be able to make much use of this technology to break the state’s information monopoly, Shanor claims:

When . . . the new [computer] technology moves outside of the laboratories and institutes, access will be multiplied many times. This will have profound effects on the way that information is exchanged. Not only for the needs of the state, but in the interests of the next generation of Sakharovs opposing the state’s right to decide what can be written or spoken. . . . Everyone will have a better chance of being better informed, and as a result the regime may decide that its media will have to be . . . more straightforward and complete (148-9).

Thus, if Shanor’s predictions are accurate, the telematic revolution may well be the most promising agent of change in the Soviet media structure due to its many intersecting technologies (computers, telephony, satellites) and therefore to its possible multi-faceted and numerous effects on the society as a whole. This combindant technology thus can be considered a main source of stress upon both the Soviet media and political structures, and thus
will be a major agent of change.

An Application of Burke’s Pentad to the Soviet Society and Media System--Model Discussion

Kenneth Burke’s dramatistic approach to social analysis is both a popular and a powerful tool for describing in a dynamic fashion the functioning of practically any human action within most any scene. Through his "pentad," one can see how the new communication technologies can act as an agent of change upon the Soviet media system and the larger society. In the model presented here, both levels of analysis are represented through pentads, in which two sets of act, agent, agency, scene and purpose operate within a field of ideological and socio-cultural assumptions. These two levels, it must be noted, interact with each other and with the assumptive field. In keeping with Burke’s theoretical assumptions, this is a dynamic model of media behavior (cf. Burke 455).

On the societal level (red pentad) the "Act" is the intentional effort of the Soviet leadership to modernize their society. Obviously, the "Agent" here is the Soviet government. Modernization is to be achieved, it is hoped, by adoption of new technologies, both in the industrial and communicative spheres. Soviet society (the "Scene") is what the Party leadership want to make more competitive ("Purpose") with Western, first-world nations, particularly
the United States. This process inevitably will have to mediate betwixt different and opposing drives. Tension will exist on the 'x' axis between tendencies towards collectivism (required for ideological control) and individualization (needed for market competitiveness). A similar tension (displayed on the 'y' axis) will also be present at a more individual level, that is, between personal identification with the larger social sphere and division or alienation from social structures.

Clearly, the Soviet media system (the green pentad) will become an integral participant in this societal-level pentadic interaction. On this lower level, the "act" is the incorporation of new media technologies into the media system. This "act" on the media system level thereby serves as a subset to the societal-level act of modernization, and thus is congruent with this broader effort of Soviet leaders. The "agent" for media-system change, however, is positioned to be the new media technologies themselves. This placement might cause pause for some, but it is the writer's contention that the technological attributes of these new communication media force certain changes in the mass media structure (i.e., towards decentralization). Hence, this media-system level of "agent" is not congruent with the societal-level "Agent" (the government) and thus is a source of instability (or dynamism) in the model. Simultaneously, the "agency" role is likewise shifted between the levels, with the state's media policy-makers now being the unwitting (or
partially-witting) means by which the new media technologies enact their "will", as it were. The "purpose" of the media system is merely to respond to the various societal demands, varied as they are.

The tension dynamic also appears on this level on two axes: on the "x" axis, there is the dichotomy of centralization on the media structure (that is, the pressure to serve the "national" needs of the USSR) versus decentralization. (the requirement to serve various "local" needs, as per language et al, in order to address national concerns) Tensions present on the "y" axis focus more on a level of audience analysis: should the receivers for the Soviet mass media be considered either a "mass" audience (in keeping with Soviet tradition) or, more in line with present reality, as a "diffused" audience? As the writer sees it, the impact that the new media technologies such as VCRs, DBS satellites and telematics are and will continue to have on the Soviet media audience suggests that the later view is the more appropriate one for Russian media planners to give assent to.

As this pentadic model demonstrates, the current Soviet media structure is in a dynamic and far-reaching process of change. New communications technologies are the agent of that change, as the current Soviet leaders well know. In their quest to modernize the economy of the USSR, the Kremlin has had to open a Pandorra’s box of technical tools that...
possess an ideology of their own. Whether or not this politics of technology can be kept within a Marxist-Leninist straitjacket must be a troubling question for Soviet leaders indeed. This writer believes that within these new communications technology lie the seeds for another October Revolution.
WORKS CITED

Aviation Week & Space Technology. 120 (March 5, 1984)

_____ 122 (March 25, 1985) 26.


_____ . "Computerization Encounters Difficulties." 38


Starr, Frederick. "Technology and Freedom in the Soviet

Times (London) "Hi-tech Launch at the Kremlin." March 25, 1986:24H.

A DUAL-LEVEL SOCIETY AND MEDIA
PENTADIC INTERACTION MODEL

Societal level = red (outer)
Mass Media level = green (inner)

Ideological/Socio-cultural Assumptions

PURPOSE

INDIVIDUALIZATION
competitiveness
to respond to societal demands

ACT
modernization

SOCIETAL LEVEL

SCENE
soviet society

IDENTIFICATION

state media policy makers

media system

INDIVIDUALIZATION

ANNEX

centralization (national)

new media technologies
government

COLLECTIVISM

AGENT

new technologies

mass audience

PENTADIC INTERACTION MODEL

INCORPORATION
of new media technologies