

APPROPRIATING THE MASTER'S TOOLS: SUN RA, THE BLACK PANTHERS, AND BLACK CONSCIOUSNESS, 1952–1973

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In 1971 avant-garde jazz musician Sun Ra was expelled from a house in Oakland, California owned by the Black Panther Party (Szwed 1997, 330). It was the same year that he taught a course entitled “Sun Ra 171” in Afro-American Studies at the University of California, Berkeley, the readings for which reflected his eclectic interest in subjects including black literature, bible studies, ancient Egypt, the occult, etymology, and, of course, outer space (Johnson; Sun Ra). On the surface, the pairing of Sun Ra and the Black Panthers is a striking study in contrasts. The mystical Sun Ra, with his philosophies of time and space, flamboyant Egyptian and outer space costumes, and devotion to pursuing truth and beauty through music, must have seemed out-of-place to many residents of a city still watched over by leather-clad Panthers wielding a rhetoric and creating an iconography of revolutionary Marxist struggle as they engaged in direct neighborhood actions. However, at a deeper level, Sun Ra and the Black Panthers stood in relation to the broader cultural and political movements of the post-World War II era that engaged in fundamentally performative projects to change consciousness in response to the psychological alienation caused by racism and the workings of a technocratic, capitalistic society. At the same time, both appropriated technological artifacts and rhetoric and made them central to their identities in their respective projects of liberation. Yet the different artifacts they appropriated and the contrasting ways in which they redeployed and reconceived technologies reveal competing ideologies and broader conflicts over the meanings of black consciousness, politics, and social change during the 1960s.

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This paper demonstrates how technological artifacts and metaphors were used as agents of psychological change during the 1950s and 1960s. In his music, performances, and writing beginning in the early 1950s, Sun Ra appropriated artifacts and technological metaphors to create what I call a “mythic consciousness” of technologically empowered racial identity that would enable blacks to recreate and invent technologies and construct utopian societies on outer space landscapes. The Black Panthers redeployed and reconceived technologies to create a “revolutionary consciousness” with the end of political mobilization. Unlike Sun Ra’s more mythic and utopian imaginings, the revolutionary consciousness of the Panthers was terrestrially directed at economic and social change. Through the performance of artifacts during direct political action and the rhetorical recasting of advanced weaponry and outer space as a means to educate blacks about capitalist and racist subjugation, the Panthers linked their struggle with international socialist and post-colonial movements.

To date, scholars have pursued separate lines of inquiry into black appropriation of technologies, resulting in the lack of a coherent history or context for their appearance in black social, cultural and political life. As such, this work is informed by, complements, and ties together a number of works around black music, social movements, and technology during this time period. For example, there is a developed body of literature about Sun Ra (Corbett 1994, 2006; Lock 1999; Campbell), who is recognized as one of the period’s seminal musicians and the most visible adopter of technological metaphors, a practice which influenced funk musician George Clinton and many early hip-hop artists. With the exception of anthropologist John Szwed’s work (1997, 2005), most scholars do not consider the social and historical context within which Sun Ra’s music was produced or his connections to avant-garde jazz musicians in New York City during the early and mid-1960s, who used similar metaphors of consciousness and technology to situate their aesthetic practices. While there is a wide body of publications about the jazz avant-garde movement from the standpoint of both musicology and social history (Berliner 1994; Jost 1974; Lopes 2002; Robinson 2005), few scholars expressly deal with the parallel discourses of psychological liberation, cold war science, aesthetic practice, and Black Power. A more general study of technology in the realm of black culture is the focus of scholars working loosely under the rubric of “Afrofuturism,” the works of which this article draws from to inform a specific history of African American uptake of technology (Dery 1993; Eglash 2002; Eshun 1998, 2003; Weheliye 2002, 2003; White 2005; Williams 2001; Yaszek 2005). Finally, more general histories of African-American political figures and movements during this time period (Austin 2006; Ogbar 2004; Van Deburg 1997, 1992; Watts 2001) tend to deal with technologies only tangentially or,

in the case of the Black Panther Party, focus on only one element of technological appropriation (Anthony 1970; Banks 2006; Courtright 1974; Heath 1976; Torres 2003).

This article also contributes to two separate lines of literature that deal with technological appropriation and cultural histories of this time period. Rayvon Fouché (2006) and others (Eglash et. al 2004) explore African American engagement with and appropriation of material technologies and their semantic associations in ways that go beyond aesthetic representation. By focusing on "black vernacular creative technology" Fouché (2006, 642) reveals African Americans reclaiming technological agency along a continuum encompassing the "redeployment, reconception and re-creation" of material artifacts and their symbolic meanings. Fouché posits that redeployment involves the reinterpretation of an artifact while retaining its dominant use and form; reconception entails redefining a technology's meaning through its use in a way that subverts its primary function; re-creation refers to the design of an entirely new artifact and the production of an attendant set of meanings with which it is associated.

This paper considers the uptake of technologies by black artists and social movements in a way that accounts for the appropriation of material and metaphorical artifacts. While the redeployment, reconception, and re-creation of technology is evident in the work of Sun Ra and the jazz avant-garde more generally, and while the Panthers redeployed and reconceived technologies in their performances of political activity, this article supplements research in this vein by arguing that challenges to forms of black vernacular creative technology came from adopters of competing strategies of appropriation who had different ideologies of consciousness and politics. As Fouché (646) argues, drawing from the work of Kline and Pinch (1996), African Americans "create their own relevant social groups that decide which technologies work for them and how to use them." Yet, as this paper demonstrates, there is no single racial aesthetic that determines the stable meaning of a technological artifact for African Americans. The process by which these intra-racial social groups are created in a distinct historical and cultural context, the selection of artifacts and their meanings, and the emergence of dominant forms of engagement with technologies is highly contested by actors advancing competing claims of legitimate black consciousness, culture and politics.

The research presented here also extends scholarly understanding of post-war artistic and social movements and their grounding in a distinct technological and political context. Belgrad (1998, 1) chronicles a "coherent aesthetic of spontaneity" that arose in arts as varied as painting, poetry and bebop jazz during the mid-1940s as an implicitly political reaction to the psychological alienation caused by a bureaucratic and technocratic corporate-liberal culture. With a cultural lineage that extends to the innovations

of a generation of bebop jazz musicians, Sun Ra and the jazz avant-garde re-situated these spontaneous musical practices in cold war technological metaphors of systems and energy to give shape to their project of changing consciousness.¹ While most of the jazz avant-garde saw their work in pan-racial terms of creating psychological and spiritual wholeness for both white and black Americans, by the mid-1960s the proliferation of political organizations loosely grouped within a larger Black Power movement (Austin 2006; McCartney 1992; Van Deburg 1992, 1997) forced these artists to debate the meanings of art and its underlying metaphysics in light of competing definitions of legitimate black consciousness and culture and the ends toward which it should be directed.

In the end, the competing uses of technologies in black culture and politics during the 1960s reveal differing orientations toward consciousness and conceptions of racial and political identity. Sun Ra's expulsion provides the moment of symbolic denouement when these two competing approaches to technologies and consciousness could not be reconciled. The Panthers dismissed Sun Ra's techno-utopian imaginings and approach to myth in light of what they saw as their own expressly revolutionary political activities. For his own part, Sun Ra eschewed the guns, advanced weaponry, and the Panthers' vision of colonial space, positing instead a contrasting notion of black consciousness and a different, utopian end for social change. Despite this, Sun Ra and the Panthers' similar orientations toward changing consciousness through performance, shared visions that future forms of black social life were contingent upon the appropriation and control of technologies, and their establishment of cultural legacies mark the historical context within which these discourses arose.

Sun Ra, Mythic Consciousness and the Black Knowledge Society

In 1952 jazz musician Sun Ra began using metaphors of cold war technologies in his performances in an effort to create a technologically-empowered mythic consciousness for black people that he imagined would

1. Fred Turner (2006) traces a parallel critique of technocratic society and psychological fragmentation among white New Communalists, a distinct social movement within the 1960s counterculture whose members turned toward consciousness as the site of social change and the means with which to build new utopian and egalitarian communities. In addition, the cultural uptake of cold war science was not limited to white Americans; while without identifying this turn to consciousness, Lynn Spigel (2001) argues that the black press, political leaders, and artists during the 1950s and 1960s recast outer space in terms of the struggle for civil rights. For example, Spigel cites how Sun Ra sought to reclaim spaces for the imaginative rethinking of the African diaspora through the use of technological metaphors.

enable them to control technologies and build the societies of the future. Through his music Sun Ra constructed and performed what I call a 'black knowledge society,' a metaphorical utopia of consciousness facilitated by science and technology and grounded in the cultural values of ancient Egypt and a re-imagining of outer space. Sun Ra's engagement with artifacts and metaphors of energy, outer space, and advanced technologies represents a black cultural uptake and reconception of cold war science in terms of long-established African-American social narratives of liberation and empowerment.

Sun Ra felt that African Americans were going to be left behind as the technology changed around them unless they developed the technical agency to both use and reinvent the tools of white society. For Sun Ra, this agency could be established through the creation of a mythic consciousness for black people that was centered on the metaphor of a 'black knowledge society' informed by the cultural imagining of Egypt and outer space. Beginning in 1952 when Sonny Blount, as he was then known, legally changed his name to Le Sony'r Ra in reference to the Egyptian sun god (Campbell), Egypt became Sun Ra's dominant metaphor for a powerful black technical civilization. While tracing the roots of black Americans in Africa and Egypt was common in political movements and popular culture during this era, for Sun Ra Egypt was especially important because it emphasized an African-American heritage rooted in a civilization known for its technology. In Sun Ra's formulation, the historical role that blacks played in technical achievement could serve as the foundation for the development of future forms of black-valued technology and the basis for African American claims on the landscapes of the future. The theme of futuristic landscapes was incorporated into his career in 1950 or 1951, when Sun Ra started a band called the Outer Space Trio to play his own unorthodox compositions. In the same year that Sun Ra changed his name he also proclaimed that he was a citizen of Saturn to the members of his band.

To change African Americans' consciousness of their technical proficiency, the values that would underlay the creation and re-invention of black technologies, and the future landscapes upon which utopian forms of black collectivity could be built, Sun Ra created a performance style around the 'black knowledge society.' The themes of the black knowledge society became a regular part of the performances and music of the Arkestra (his frequently and variously re-named big band, founded in 1954) during the mid-1950s and persisted throughout Sun Ra's career. Songs including "Sunology" (Le Sun Ra [1957] 1992), "Future" (Sun Ra [1957] 1991), and "Saturn" (Sun Ra [1958] 1992) appeared on albums with commissioned covers that referenced themes of energy (lightning bolts and fire), outer space, and musical instru-

ments.² Small-scale electronics were redeployed as tools for changing consciousness in the Arkestra's performances when tiny robots with flashing lights and mechanized cars were sent into the audience (Corbett 2006, 6). The elaborate costumes of the Arkestra, which included Egyptian headgear, outer space suits, and space hats with lights, were similarly intended to change African-American consciousness; as Sun Ra notes, these performance practices were directed toward making "the black people, the so-called Negroes, conscious of the fact that they live in a changing world . . ." (Szwed 1997, 173).

This emphasis on the performance of the 'black knowledge society' to change consciousness and build black utopias was simultaneously a rejection of Christianity and a turn toward culture as the locus for social change. Sun Ra had a deep distrust of Christianity, a religion that he felt limited the potential for African Americans to imagine a technologically-mediated future. As Sun Ra recounted, during the 1950s he was distributing pamphlets and preaching on the South Side of Chicago urging blacks to study technology so they would have a role in this new world: "A black minister told me, "Hey, well, you know, it ain't in the bible." I'd say, "They're going to the moon, they're going to go further, I don't care what it says in the Bible—that's what's going to happen" (Szwed 1997, 253). At the same time, this rejection of Christianity foreshadowed his turn away from the conventional politics of the civil rights movement in favor of a politics of consciousness: "If people would base what they done on culture and beauty, they would immediately become part of the nation of the world that knows beauty is necessary for survival" (Lock 1997, 24).

Similar to Sun Ra, during the 1950s leaders of the Nation of Islam sought to change black consciousness as a means toward psychological, social, and economic liberation, although they did not explicitly embrace the reconception of technologies to restore black technical agency and build utopias. The Nation of Islam was a predecessor to the black nationalist movements of the mid-1960s and Elijah Muhammad, its leader during the 1950s, and Malcolm X, its most visible spokesman, believed that "cultural and spiritual rebirth" for blacks was a means toward social and economic self-sufficiency (Ogbar 2004, 22). Members of the Nation embraced a project of changing black consciousness of racial oppression, self-worth, and group identity that was predicated on the performance of black pride and power in both their rhetoric

2. Establishing dates for many of the Arkestra's recordings is a daunting task. Most of the albums the Arkestra recorded in the mid-1950s were released in the 1960s by Sun Ra's own makeshift record label, Saturn. According to Corbett (2006), who owns an extensive collection of Sun Ra and the Arkestra's materials from 1954–1968, the covers referenced here were drawn in the late 1950s by Claude Dangerfield, an artist commissioned by Sun Ra and about whom little is known.

and manner, where their meticulous dress and disciplined bodies symbolized a repudiation of black popular culture and the embrace of restraint and work as a means of empowerment (23–25). In addition, technologies played a prominent role in the eschatology of the Nation of Islam and Muhammad taught his followers that the black race derived from ancient Egypt.³ However, the technological metaphors that were deployed supported the theology of the Nation, unlike Sun Ra's appropriation and creation of black-valued technologies as a means to build new black societies.

Similarly, while other jazz artists during this time period used themes of outer space in their music, they were not bound into a project of changing consciousness to claim technological agency and did not serve the same utopian function. Rather, they were celebratory cultural expressions of technical accomplishments or ways of aestheticizing new technologies in much the same way that the mimicry of train sounds served as a trope for big bands (Dinerstein 2003). Representative examples include Shorty Rogers's ([1956] 1999) *Martians Come Back* and the 1958 album *Cosmic: Scene: Duke Ellington's Spacemen* by Duke Ellington ([1958] 1994), which was prompted by the launch of the first American satellite and served to celebrate this technical achievement through music and performance that remained squarely within a mainstream jazz tradition.

Energy and Psychological Reintegration in the Work of Sun Ra

While the reconception of technological metaphors marked Sun Ra's conscious attempt to change the minds of his audience and claim black technical agency to build utopias, his musical practice was rooted in a post-war critique of technocratic society advanced in what Belgrad (1998) has identified as the "culture of spontaneity," an avant-garde aesthetic formation that crossed racial lines and developed in response to the perceived psychological splitting of corporate liberal culture. Through cultural forms including jazz, abstract expressionism in painting, and the spoken word poetry of the beats, Belgrad argues that the culture of spontaneity adopted a metaphysics of energy present in cold war science to reintegrate individual psyches and enable new forms of intersubjective understanding. As I will demonstrate,

3. Elijah Muhammad believed that Allah would destroy the world through the use of a spaceship and black Muslims scanned the skies of Chicago in the 1950s in anticipation of its arrival. As Essien-Udom (1962, 131) notes, "A dreadful plane 'made like a wheel' was pointed out to him [Muhammad] in the sky by Allah. Its dimensions were half a mile by half a mile. It was a 'human built planet' . . ." Also, in Muhammad's teachings Caucasians were "grafted" from the black race by a black scientist, Yakub, who "discovered that through some sort of 'mutation' black people could be given brown, red, and yellow complexions" (140). For connections between the ancient Muslim myth of Yakub and the politics of black American Muslims see Laremont (1999).

by the end of the 1950s Sun Ra conceived of the world as made up of patterns of energy that could be coordinated through music and engagement with the technologies that produced it. In this regard, Sun Ra's work is a cultural proto-informational imagining that runs parallel to the cybernetic research of the decade.⁴ Sun Ra's exploration of these themes in his music is evident in his redeployment and re-creation of musical artifacts and in his revival of collective improvisation in the big band form.

The earliest surviving recordings of the Arkestra from the mid-1950s to 1961, when Sun Ra left Chicago, demonstrate the music's derivation from bebop, an idiom whose musicians were a part of the culture of spontaneity. Belgrad (1998) argues that the spontaneous aesthetic placed an emphasis on intersubjectivity, mind-body holism, and plastic dialogue as a form of political opposition to a post-war social and economic arrangement characterized by abundance, scientifically and technologically-managed work, and mass consumption and leisure that was desensitizing people from human needs and alienating them from their labor, bodies, psyches, and communities. Thus, the artists who espoused spontaneous practices used the materials and process of creation to produce psychologically whole beings. "Plastic dialogue" involved bringing the unconscious into awareness and engagement with the external environment through "dialogue" with the materials of the artist, a process never completely ended because, following the philosophy of Whitehead, the self was always emergent through interaction as an organized "event" in the "flux of energy through space-time" (Belgrad 10–11).

While Sun Ra's conception of mythic consciousness was articulated in terms of a group technological agency for black people, the use of "plastic dialogue" in his music was directed at fostering individual psychological change to enable intersubjective understanding and coordination. That Sun Ra embraced the spontaneous aesthetic is reflected in the album covers he drew during the 1950s through the mid-1960s, which used the automatic drawing techniques of the surrealists pioneered by Breton (Corbett 2006, 8). In addition, during the mid-1950s Sun Ra began experimenting with the technologies of musical production, including incorporating electronic and "do-it-yourself," or recreated, instruments into the Arkestra's performances. These instruments were used as technologies to facilitate new flows of energy through the band, coordinate the consciousness of the players, and bring them "in tune with nature and nature's vibrations" (Robinson 2005,

4. This was characteristic of both white and black art of this period. Turner (2006, 45–51) argues that for lower Manhattan artists, including Cage and Rauschenberg, in the "Cybernetic Art Worlds" of the late 1950s and early 1960s "the making of art had become the building of systems of pattern and randomness, and thus, in Claude Shannon's sense, of information." Sun Ra and John Cage performed together at Coney Island on June 8, 1986.

29). This is clear in how Sun Ra reinvented the big band sound and organizational form, which was originally reliant on hierarchical coordination to be "propulsive, fast, fluid and precise" as a reflection of modernist "large scale industrialization, whether of Henry Ford's assembly lines or cross country express trains" (Dinerstein 2003, 6). Sun Ra's life-long association with big bands led him to fashion the Arkestra into a site of novel experimentation with collective improvisation, reflecting his tutelage during the 1940s with Fletcher Henderson, one of the architects of the big band sound. While tracing the roots of this practice in New Orleans jazz, saxophonist Archie Shepp credited Sun Ra with its revival in avant-garde jazz and described the practice as using a diversity of voices to achieve "a certain kind of unity" (Robinson 2005, 7). Intersubjective "unity" and consciousness coordination with the natural world were emergent properties of the individual band members' interactions with the technologies of musical production through collective improvised playing.

This shift in aesthetics, performatively, instrumentally, compositionally, and, in the configuration of the big band, structurally, reflects Sun Ra's preoccupation with consciousness, both in terms of creating a group mythic identity and an individual psychological reintegration through the use of artifacts to bring individuals and their environment into accordance with the energy patterns of the universe. As Sun Ra ([1957] 1991) explained, these new forms of instrumentation and performance cast musicians in the role of "sound scientists" and "tone artists" who could use these techniques to change the minds of their audiences and create emergent forms of intersubjective awareness and coordination. When Sun Ra moved to the East Village of New York City in 1961 he encountered a community of avant-garde artists who were also using the aesthetic technique of plastic dialogue to articulate a new relationship between individuals, society, and the environment, although their practice lacked Sun Ra's explicit utopian mythologizing or even strong elements of the music's relationship to racial identity. For example, Szwed (1997, 234–235) describes the "new metaphors" of "energy, spirituality, metaphysicality, and freedom" and "new definitions of improvisation" that appeared in all the avant-garde arts of this time period. All of these factors suggest that Sun Ra was broadly understood when he declared: "We're like space warriors. Music can be used as a weapon, as energy. The right note or chord can transport you into space using music and energy flow. And the listeners can travel along with you" (Szwed 175).

Psychological Liberation and the Jazz Avant-Garde

Contemporaneous with Sun Ra, avant-garde jazz musicians in New York City during the early and mid-1960s experimented with many of the same

aesthetic techniques, explicitly adopting synthetic and do-it-yourself technologies into improvisational musical practices to restore the wholeness of the psyche. As jazz musician Albert Ayler described it in 1966: "The music which we play together will help people to better understand themselves, and to find interior peace more easily" (Schwartz). As with Sun Ra, these musicians re-situated the spontaneous musical practices of an earlier generation expressly within vernacular technological and systems metaphors to give shape to their project of changing individual consciousness as a means toward social change.

The musicians of the New York City avant-garde jazz world traced their cultural lineage to the spontaneous aesthetic. Signaling his affinity with these artistic principles, Ornette Coleman's seminal 1960 album *Free Jazz*, which featured musicians collectively improvising, included a reproduction of Jackson Pollock's 1954 painting *White Light* on its cover. In the early 1960s the redeployment, reconception, and re-creation of musical technologies had also become common in avant-garde jazz. Experimentation with the technologies of musical production included the incorporation of eastern instruments into jazz, the use and re-design of found objects to produce sound, and the famous plastic (and thus synthetic) saxophone of Ornette Coleman and the plastic reeds that Albert Ayler used. By the end of the 1960s some of these artists were experimenting with electronic instruments and recording technologies, and creating immersive, mediated environments for the performance of their work.

Given that the world was conceived in terms of patterns of energy for many of these artists, collective improvisation was premised on the idea that there was an emergent relationship between individuals, collectivity, and the environment that could be realized through creative engagement with musical artifacts. The staging of a performance thus was a way to coordinate consciousness and create an intersubjective order that existed through plastic dialogue with the materials of the musicians. In language that is strikingly parallel to cybernetic and systems theories, the accomplished and influential jazz avant-garde pianist Cecil Taylor, who was based in New York throughout a career that began in the mid-1950s, described his band as a "unit" which was coordinated by his piano as "a catalyst feeding material to soloists in all registers" (quoted in Bartlett 1995, 280). For Taylor, the body of the soloist was incorporated within the larger "unit" held together by the technologies of musical production; Taylor's music binds the human and the tool together, creating an energy system that "allows the 'player' a self-generated but always communally directed energy field" (Bartlett 1995, 280). It is also of note that Taylor is a poet as well, and cites influences including Robert Duncan and Charles Olson, two Black Mountain artists central to Belgrad's (1998) study of the culture of spontaneity.

Thus, in the work of Taylor and Sun Ra among others, the composer or bandleader functioned as a designer that convened a system within which an emergent relationship between individuals was created through engagement with the technologies of musical production. Unlike the big band or hard bop musicians of an earlier generation, these artists were not concerned with scripting the interactions of the band; rather, the players would "develop a collective direction that characteristically . . . feels larger than any of them, as though it had a life of its own" (Becker 2000, 172). In privileging intersubjectivity, collective improvisation also erased the distinction between soloing and accompaniment, which was crucial to both big band and hard bop jazz (Such 1993). On the whole, these practices were aimed at the psychological integration of all individuals and the creation of intersubjective awareness, and thus consciousness was not construed strictly in terms of racial identity. This caused tension during the mid-1960s as many Black Power activists posited the psychological liberation of blacks as the primary means of practicing politics.

Consciousness and Black Political Identity

By the mid-1960s a number of organizational alternatives to the civil rights movement achieved prominence and espoused new tactics for black political and social liberation. While their political thought differed, Black Power activists had a shared orientation toward changing black consciousness through performances of culture and political activity, both reformist and revolutionary. As Austin (2006, 72–73) argues, the organizations associated with Black Power espoused a common project to invent new political cultural forms that would "distinguish those who were 'Black' from those who were 'Negro.'" While the cultural discourse of Black Power was inherently ambiguous and lent itself to competing articulations (McCartney 1992; Van Deburg 1997), the divergent and highly contested constructions of black identity during this period signaled a broader concern with the mind and culture as the primary sites for the practice of politics.

The different articulations of black identity during this period were attempts at self-definition, which was posited as a means to transform the individual psyche, overthrow white cultural hegemony, and achieve social and economic change. Stokely Carmichael, the leader of the Student Non-violent Coordinating Committee (SNCC), used the phrase "black power" in 1966 during a civil rights march in an attempt to psychologically liberate blacks from their fear of whites (Ogbar 2004). Later, the creation of a distinctly black cultural heritage and alternative group values served a similar function for Carmichael, freeing blacks from what he called "the dictatorship of definition, interpretation and consciousness" (quoted in

Van Deburg 1997, 75–76). These alternative and empowering cultural forms were often grounded in appeals to African identity, as represented in the activities of Ron “Maulana” Karenga’s US Organization. As some scholars have argued (Austin 2006; Van Deburg 1997), changing the black psyche through the creation of alternative cultural forms was conceived by these activists as the means of achieving greater social, economic, and political power for blacks, not ends in themselves.

Black Power intellectuals, activists, and artists saw their efforts to change black consciousness and culture as an alternative form of politics to be contrasted with both the tactics and integrationist goals espoused by the civil rights movement. As such, the arts had political import and became a contested ground for claims of authentic black identity. The poet, playwright, and intellectual Amiri Baraka argued for “the service of art to politics” and the creation of a pure black aesthetic (Robinson 2005, 31). This approach to black culture ran counter to the understandings and aesthetic practices of many musicians in the jazz avant-garde who often “stridently resisted any single narrative of racial and socio-aesthetic identity” (1). While the black aesthetic espoused by intellectuals like Baraka sought to give shape to a coherent black identity through appeals to a mythic past or an essential blackness, many members of the jazz avant-garde saw the psychological liberation of the individual, black and white, and the creation of intersubjective awareness as the primary purpose of their music. Thus, Albert Ayler described his music as the pursuit of spirituality and universal truth directed at freeing individuals from the “ghettos” in everybody’s head, black or white (Schwartz). Ayler did not posit a militant black political identity or a single notion of cultural authenticity; he believed that for black Americans spiritual truth would be achieved through individual psychological wholeness. It is to this end that Ayler celebrated the rise in black consciousness: “They are beginning to see who they are. They are acquiring so much respect for themselves. And that’s a beautiful development for me because I’m playing their suffering, whether they know it or not. I’ve lived that suffering. Beyond that, it all goes back to God. Nobody’s superior, and nobody’s inferior” (Schwartz).

While some musicians, most notably Archie Shepp, explicitly cast their music as deriving from historical black cultural forms as a means to change racial consciousness in line with the aims of the Black Arts Movement, this was not foregrounded in most of the work of the jazz avant-garde during the 1960s. Instead, much of these musicians’ work embraced a pan-racial approach to individual psychological wholeness that derived from their common critique of post-war society and the technological metaphors that served to ground their aesthetic practice. Sun Ra’s work, with its simultaneous positing of a mythic consciousness for black people and psychological wholeness for all races, enabled him to have more flexibility than many

other artists to speak across the various political and cultural movements during this period. This flexibility is evident by his connections to members of the Black Arts Movement and performances at the Black Arts Repertory Theater, although it is clear that he was uncomfortable with racial conflict and committed to his own techno-utopian ideas of consciousness and society (Robinson 2005, 10–11; Szwed 1997, 210–213).

The Oakland-based Black Panther Party for Self-Defense, which was founded by Huey P. Newton and Bobby Seale in 1966, adopted a similar orientation towards changing consciousness, although in drawing explicit contrasts to organizations including Karenga's, party members argued that it was not predicated on black culture alone, an emphasis that Newton derided as "pork chop nationalism" ("Huey Newton Talks to The Movement" 1968).⁵ Rather, the Panthers performed the technology of the gun and made rhetorical use of advanced weaponry and outer space to foster what Newton referred to as a "revolutionary consciousness" as a means toward political mobilization. In the process, the Panthers created a symbolic style of political activity to change consciousness and to teach blacks an internationalist socialist ideology that posited oppression, and not solely racial identity, as the correct basis for political action (Foner 1970, 57–62). For the Panthers, "revolutionary consciousness" was predicated on blacks realizing that they were members of an oppressed race that stood in solidarity with similarly-positioned groups subject to an overarching system of capitalistic domination.

The Black Panthers, Revolutionary Consciousness, and the Performance of Technology

Technologies were the key mediators of the Panthers' ideology of revolutionary consciousness. Reflecting their emphasis on the mind, the Panthers appropriated and performed the gun through symbolic and stylized political actions intended to psychologically liberate blacks while teaching local community members the principles of armed self-defense. Meanwhile, rhetoric and images of advanced weaponry and outer space were used to reflect and construct the Panthers' evolving orientation towards revolutionary political activity and link the struggle of black communities in America to global anti-colonial and socialist revolutionary movements.

While other nationalist organizations appealed to African identity or

5. The Party's Minister of Information Eldridge Cleaver, among other party members, developed this critique on grounds that the "cultural nationalists" embraced capitalism and precluded the building of revolutionary coalitions between races. Party member Linda Harrison argued that cultural nationalism was "a universal denial and ignoring of the present political, social and economic realities and a concentration on the past as a frame of reference" (Foner 1970, 151).

constructed a black aesthetic to change consciousness, the Panthers engaged in symbolic forms of direct political action to liberate the black psyche. Following Fanon, Newton believed that violent struggle “frees the native from his inferiority complex and from his despair and inaction; it makes him fearless and restores his self-respect” (Ogbar 2004).⁶ Where this violent struggle was not possible given the conditions necessary for revolution, Newton believed that the stylized performance of resistance and self-defense would have the same psychological effect. It was through these performances that the gun became a tool for the creation of a revolutionary consciousness in the minds of the black masses. The gun was viewed as a prosthesis of the human body, “the extension of our fanged teeth that we lost through evolution” (Foner 1970, 60), that was only imbued with meaning through its reconception in a performative context. The gun augmented the body, while the performance was designed to enable blacks to take their “mind back from the omnipotent administrator, the controller, the exploiter” (59).

The performance of direct actions was highly stylized to change the consciousness of people on the street, or the ‘lumpenproletariat’ in the Panthers’ Marxist terminology. Newton and the Panthers believed that the cultural choices of dress, language, and the presentation of their bodies were revolutionary political acts because they taught their ideology to the un-awakened masses. Direct actions like the “police patrols,” implemented by the Panthers in Oakland during the fall of 1966, were performed by youthful Panthers speaking the language of the street, using artifactual props like the gun, and wearing afros and uniforms, which consisted of a blue shirt and black pants, beret, and leather jacket. Along with their disciplined marches and the regimented and martial way they stood outside courthouses when one of their members was arrested, these stylistic practices served as the symbolic presentation of their revolutionary consciousness and were oriented toward both the liberation of the individual black psyche and changing the individual’s consciousness of being part of an oppressed group.⁷ As Newton

6. Party co-founders Newton and Seale were particularly influenced by Fanon’s *The Wretched of the Earth* (1963) and *Black Skin, White Masks* (1967) (Foner 1970, 58–66; Clemons and Jones 2001, 27–39).

7. Turner (2006, 38) argues that the contemporaneous white New Communalists adopted a similar approach to consciousness where “individual lifestyle choices became political acts.” However, while the New Communalists posited that the “self was the ultimate driver of social change” (38), the consistency of the Panthers’ presentation developed a notion of consciousness in group terms. Only by changing the individual mind’s awareness of being part of an oppressed group could a revolutionary consciousness be created and political action carried out. In this sense, Party member Connie Matthews argued that the individual freedom sought by the hippies was contingent upon group freedom for blacks: “Now, I am saying you have had what is known as group freedom and you are trying to find individual freedom . . . until everyone has known what group freedom is you are not going to be able to exist in your hippie and yuppie societies with individual freedom” (quoted in Foner 1970, 157).

argued, the stylized performance of direct action was designed to teach the revolution to an uneducated public: "The large majority of black people are either illiterate or semi-literate. They don't read. They need activity to follow . . . We have to engage in action to make the people want to read our literature" (quoted in Foner 1970, 63). As many scholars have argued, this emphasis on cultural style as a method to change black consciousness produced "tangible psychological effects on black minds and left a distinctive cachet on all of American culture" (Van Deburg 1997, 81).

Given this use of the gun in a performative context, under the categories of technological appropriation proposed by Fouché the Panthers "re-conceived" the gun's dominant meaning and function (Fouché 2006, 642). While some scholars argue that the Panthers redeployed the gun to invert its historical role in the subjugation of African Americans, and thus its uptake represents the appropriation of its "material and symbolic power" to "create a sense of fear among many white Americans" (Fouché 2006, 652), a detailed reading of Newton's conception of the police patrols reveals his concern with changing black, not white, consciousness as a means of political mobilization. In keeping with Newton's conception of the Panthers as the Vanguard party, whose "main purpose . . . should be to raise the consciousness of the masses," the armed patrols "were a means of recruiting" for the Panthers, as community members saw "proud Black men armed with guns and a knowledge of the law" standing as equals to the police for the first time (Foner 1970, 42–43, 120–121). Later performances of the gun, including the 1967 action when the Panthers entered the California State Capitol to protest a bill that would have prohibited the carrying of firearms in public, followed the same principle of using the symbolic reconception of the artifact to change the consciousness of blacks who either witnessed it live or, more importantly, encountered it through the deft manipulation of the news media.⁸

The idea of "police patrols" also reveals the Panthers' reconception of the artifact's function in ways oppositional to both its dominant use and the primary forms of black redeployment. While other black self-defense organizations preceded the Panthers, notably Williams's Black Armed Guard

8. The Panthers consciously sought, and received, attention from the news media for their political actions, which were, in part, designed with this end in mind. As Seale (1997, 149) describes it: "Huey understood a revolutionary culture, and Huey understood how arms and guns became a part of the culture of a people in the revolutionary struggle. And he knew that the best way to do it was to go forth, and those hungry newspaper reporters, who are shocked, who are going to be shook up, are going to be blasting that news faster than they could be stopped." An account of the Panthers' action in Sacramento was published in *The New York Times Magazine* on August 6, 1967; Newton is quoted saying "Ninety per cent of the reason we carried guns in the first place was educational. We set the example. We made black people aware that they have the right to carry guns" (Stern 1970).

and the Deacons for Defense and Justice (Tyson 2004), Newton explicitly contrasted his approach to the gun with theirs. Newton refused to appropriate weaponry under the auspices of enforcing federal laws in lieu of police protection. Instead, Newton ([1973] 1995, 121) argued that the Panthers used the gun to “teach the community security against the police” so members could defend themselves against illegitimate colonial oppression by the state. In short, Newton contrasted his actions from those of Williams by arguing that the Panthers “viewed the state as the enemy” (112).

It is in this context that rhetoric of advanced weaponry was used in the pages of *The Black Panther*, the Party’s official communications organ (Rhodes 2001, 1999), to teach blacks that their struggle was against an exploitative capitalistic process of colonization and guide their understanding of the coming revolution.⁹ Thus, by 1968 the Panthers symbolically connected the use of the gun in local black communities with global anti-colonialist struggles, particularly in Vietnam, which served as a model for black resistance in America.¹⁰ An editorial published in *The Black Panther* on May 18, 1968 linked the activities of the Panthers and the Vietnamese through technology and cast the revolution in terms of progressive stages of appropriation: “In these days of struggle for Black Liberation, here in America,—we have no modern technical equipment compared to that of our oppressor—going back to Vietnam, as time progressed, the Vietnamese people have the same kind of technical equipment as the U.S. imperialists which also is made by the same manufacturer . . . ” (quoted in Foner 1970, 16–18). Newton explicitly argued for this teleological understanding of revolutionary struggle following the model of their Vietnamese “brothers” when he wrote in 1968 that “the amount of guns and defense weapons, such as hand grenades, bazookas, and other

9. It should be noted that unlike the gun, which could be performed openly on the streets of Oakland, rhetoric of advanced weaponry stood in place of actual artifacts, perhaps given the impossibility of their open redeployment, Newton’s own concerns that they were too radical for the community at that point in time, or their strategic underground use by the organization. Given the state repression that the Panthers experienced in response to the armed patrols, many scholars (Van DeBurg 1992, 165–170) have noted that the Panthers’ use of the gun proved counter-productive for their long-term organizing activities. Newton ([1973] 1995, 329) himself cites ideological disagreements about violence as one of the reasons for the fragmentation of the Party in 1970 after his release from prison: “We were looked upon as an ad hoc military group, acting outside the community fabric and too radical to be a part of it.” Finally, while details are incomplete, some scholars (Umoja 2001) have argued that the clandestine use of more advanced weaponry was planned by elements of the Party.

10. This was in marked contrast to other organizations including the Nation of Islam and the SNCC under the leadership of Stokley Carmichael, who after resigning from that organization briefly served as the Black Panther Party’s Honorary Prime Minister in 1968 when Newton was imprisoned. The Panthers were criticized by other black nationalist organizations for the emphasis they placed on the Vietnam War and their willingness to work with liberal whites. The Panthers also worked to create multi-racial coalitions with other oppressed communities (Maeda 2005; Ogbar 2006).

necessary equipment, will be supplied by taking these weapons from the power structure, as exemplified by the Viet Cong" (quoted in Foner 44).

Similarly, rhetoric and imagery of outer space served to educate the black masses about the international dimensions of the black struggle in the United States and a history of colonial technological enslavement. Party member Connie Matthews delivered a speech in 1969 that cast the American space program as an extension of a global Euro-American capitalist project of colonization. Speaking of a "world proletarian struggle" that pits "the oppressed versus the oppressor," Matthews argued that "you have to understand that we must stop talking in terms of countries, we have to talk about internationalism because the United States has now gone to the moon, they will go to Mars, they will go to Venus next, so that it is not just a question anymore of planet earth" (quoted in Foner 1970, 154). The January 25, 1969 issue of *The Black Panther* featured a drawing called "Imperialist Plans . . ." which depicted pigs (white exploiters) dressed as policemen driving black slaves on an outer space landscape. One of the pigs is saying "hey handle those slaves with care we're gonna need them for Mars, Pluto and all the other planets". A slave is responding: "I knew we should have stop [sic] this shit before it got off the ground" ((Douglas 1969, 24). Published six months before the Apollo moon landing, this drawing makes clear that the Panthers depicted outer space exploration as the writing of another chapter in a white capitalist and colonial history.

Newton argued that control over technologies was essential to a Western capitalistic project of domination, which rendered all colonized communities and nations, regardless of geography, subject to a similar imperialism. Thus, it was technology that compelled the link between oppressed communities in Oakland and the "Third World." Speaking of anti-colonial struggles, Newton argued in 1969 that technology has cast all oppressed peoples into a similar situation: "They are not able to be free simply because of highly technological developments that the West has that makes the world so much smaller, one small neighborhood" (quoted in Foner 1970, 72). Strikingly, Martin Luther King Jr. used a similar 'neighborhood' metaphor one year prior in his 1968 speech "Remaining Awake Through a Great Revolution" when he argued that advances in technology compelled a global "human rights revolution" necessary for the survival of all races given humanity's newfound interdependence.

Yet while King sought to internationalize the civil rights struggle and change people's values given the nature of world-spanning technologies, Newton explicitly raised the issue of control over technologies and called for globalized forms of resistance through technological appropriation. In keeping with the Panthers' approach to the gun and advanced weaponry, Newton's 1970 doctrine of "revolutionary intercommunalism" posited that

the goal of the movement is when people “seize the means of production and distribute the wealth and the technology in an egalitarian way to many communities of the world” (Clemons and Jones 2001, 27). An egalitarian distribution and control over technology would serve as the foundation for a new world socialist order based on equality, and, unlike King, Newton argued that this could only be accomplished by the forceful appropriation of technologies through armed struggle. While a revolutionary consciousness was essential to precipitating this struggle, after victory over colonialist and capitalist forces, the control over technology, mass media, the means of production, and institutions “will produce new values, new identities; it will mold a new and essentially human culture as the people resolve old conflicts based on cultural and economic conditions” (quoted in Hilliard and Wiese 2002, 197).

Competing Strategies for Black Vernacular Technologies

While Sun Ra and members of the Black Panther Party were among the most visible adopters of technologies during the 1950s and 1960s, the differences in their strategies of “black vernacular creative technology” are apparent. As such, the different artifacts they embraced reveal their competing conceptions of consciousness and the contrasting ends they posited for social change. While Sun Ra constructed a metaphoric black knowledge society that he believed would create a mythic consciousness for African Americans and enable them to build techno-utopian communal forms in outer space, Newton and the Panthers sought to teach blacks a revolutionary consciousness that would precipitate a global armed struggle wherein oppressed communities would seize the means of production and control the technologies that were historically used to enslave them. At the same time, however, Sun Ra and the Panthers engaged in consciousness politics and saw future forms of black social life as contingent upon the appropriation and control of technologies, suggesting the technological context within which they produced their work.

Sun Ra’s expulsion from the Panthers-owned house in 1971 provides the symbolic moment when these two incompatible approaches to consciousness and technologies clashed. Sun Ra’s biographer John Szwed relates that Bobby Seale invited Sun Ra to the house, but soon after, an “ideological split” occurred and, in the words of Sun Ra, he was “kicked out by Eldridge Cleaver or somebody” (Szwed 1997, 330).¹¹ While there are no further details of their interaction on record, Sun Ra’s 1973 film *Space is the Place* should

11. It is highly unlikely that it was Cleaver, who was expelled from the Black Panther Party in 1970 and living in exile in Algiers at this time.

be interpreted, in part, as a response to the Panthers. The film was set in Oakland and developed against white research science, black exploiters of the community, and the Panthers. While he does not condemn the Party by name, Sun Ra ultimately finds limited value in terrestrial community programs, an allusion to the Panthers, and posits that only the band's use of technology and music will liberate the people by changing consciousness. In the final sequence of the film, Sun Ra and the Arkestra play a massive concert that changes the consciousness of the audience which in turn is used as energy to power a space ship that takes them to build a utopian society in outer space.

For their part, the Panthers rejected the ends for which Sun Ra redeployed, reconceived and re-created technologies, and thus their material and metaphoric uses. While the Panthers would have had little use for the materially-recreated instruments that Sun Ra devised, the more significant challenge to Sun Ra's techno-utopian vision was at the level of metaphor. Given the Panthers' vehement rejection of the "stumbling blocks to the people's liberation struggles" of "negritude and cultural nationalism" that they felt were backward-oriented and focused on cultural change alone (Foner 1970, 111), Sun Ra's notion of a mythic consciousness would not have had much resonance. Further, the rhetoric of outer space that the Panthers used stands in direct contrast to Sun Ra's own utopian imaginings, as do the other technologies that they selected to appropriate materially and symbolically to foment their own version of revolutionary consciousness.

To this end, it is apparent that the forms of black vernacular creative technology adopted by Sun Ra and the Panthers were contingent upon their particular ideology of consciousness. The types of technologies that they redeployed, reconceived, and re-created differed, as did the meanings that this creative engagement with technology carried. If it is a misconception to assume that African Americans interact with technologies in the same way as members of the dominant culture, it is equally misleading to posit that there are similar and unchanging forms of technological appropriation for members of a racial culture. Instead, there are competing strategies of appropriation and technological rhetoric espoused by different intra-racial social groupings. What artifacts get appropriated, the meaning of these technologies, and their dominant forms of engagement are, at least initially, unsettled by struggle between different social groupings that are more or less credible given a distinct historical and social context. As this paper has suggested, the process of settling on a dominant counter-cultural use or meaning for technologies is a contested one for marginalized groups and reveals different ideological groupings within racial sub-cultures; thus, the form that black vernacular creative technology takes is itself a social process that creates and engages the multiple meanings of artifacts.

While Sun Ra and Huey Newton's disagreement regarding legitimate black consciousness and to what ends it should be directed is apparent, their emphasis on this form of politics and the appropriation and control of technologies mark the historical context in which they lived. As Belgrad (1998) and Turner (2006) both note, the focus on consciousness has deep scientific and cultural roots and played a prominent role in the artistic and social movements of the post-war era. Previously unidentified by scholars, this turn to consciousness as a path towards liberation was espoused by Sun Ra and members of the Black Panther Party along with numerous black artists, activists, and intellectuals. While the sources of this emphasis on consciousness were different for some of these individuals, it is evident that their activities during this period stood in marked contrast to those of the leaders of the organizations of the civil rights movement, who saw political and legal activism as the means by which to build a new egalitarian social structure.

Conclusion

During the 1950s and 1960s black cultural and political movements turned toward consciousness as the locus of social change. A cold war technological context formed the backdrop for this emphasis on the mind as many black artists, intellectuals and activists converged around the implications of consciousness for black identity and political action. In the music and performance of Sun Ra and the jazz avant-garde, reconceived artifacts and metaphors of technology situated aesthetic practice and gave shape to forms of psychological change. For the Black Panther Party, the performance and rhetorical recasting of technologies served to foster a revolutionary consciousness in the minds of African Americans, which became the primary site for the practice of politics.

While not equally adopted within all the various organizations of this era, artifactual technologies were central components in the performative activities of Sun Ra and the Panthers, as they were enrolled in projects to change consciousness of black identity and history and to guide forms of future action, whether utopian or revolutionary. Yet, as this paper argues, the ends posited for social change influenced which technologies were appropriated and rhetorically recast by Sun Ra and the Panthers; thus, their work represents competing strategies of black vernacular creative technology. Analysis of these differing strategies of appropriation and the ways in which artifacts serve as sites of contestation for larger cultural conflicts reveals contrasting articulations of black identity and politics. At the same time, it also suggests that there are periods of intra-racial contestation in the technological and

cultural lineage of material artifacts as they are redeployed, reconceived, or re-created in resistance to dominant cultural meanings by competing social groups. While not the subject of this paper, a potentially rewarding avenue for subsequent research on black vernacular creative technology lies in the further investigation of these periods of contestation among marginalized groups over the meaning of a technology, and whether the emergence of a dominant form of countercultural engagement closes off alternative ideas for the redeployment, reconception, and re-creation of the material form or semantic understanding of the technologies that are appropriated.

The legacies established by Sun Ra and the Black Panthers are perhaps most significant from the standpoint of cultural engagement with technologies. Sun Ra's metaphors of technology and outer space were popularized by funk musician George Clinton and the idea of a black knowledge society and its double-articulation to the past and future is clear in the performance style of Afrika Bambaataa, one of hip-hop's innovators of the 1970s and 1980s who used Egyptian costumes and outer space themes during performances. This was extended through the performance styles of a number of contemporary hip-hop musicians including Kool Keith, OutKast, and Q-Tip that Afrofuturists have theorized as creating "sonic fictions" (Eshun 1999) through themes of outer space, technology and Africa. Meanwhile, to the extent that their cultural legacy overshadowed their organizational one in their stylistic performances of direct action, the Panthers were more akin to Sun Ra and the cultural black nationalists they had criticized as ignoring "the political and concrete" and concentrating on "myth and fantasy" (Panther member Linda Harrison quoted in Foner 1970, 151).¹² In the end Newton ([1973] 1995, 330) claimed a less grandiose, but nonetheless important, legacy for the Panthers, that of raising "the consciousness of Black and white citizens about the relationship between police and minorities in this country." Yet, their performance style was widely adopted and the Panthers' iconography of the gun as a cultural symbol of political resistance is perhaps their most enduring legacy, one that can be seen in the work of many hip-hop musicians including Public Enemy and Tupac Shakur in more progressive, politically-oriented hip-hop.

12. While the Panthers had a host of "survival programs," including providing free breakfast and vaccinations for black communities, that could have served as the foundation for political action and organization, they were overshadowed by the militant *image* of the Panthers. As Newton ([1973] 1995, 330) points out in his look back: "As a matter of fact, the right to bear arms for protection appeared near the end of our program . . . and came only after those demands we considered far more urgent—freedom, employment, education and housing." While Newton blames the national media and Eldridge Cleaver for an over-emphasis on violence, this overlooks his own role in creating a Panther iconography that placed self-defense, weaponry, and violence over the functioning of these programs.

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