On the (In)compatibility of Driving and Phoning: Ask the Technology

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Abstract: In this paper I comment on the arguments put forth by Robert Rosenberger and Galit Wellner on the issue of using a mobile phone while driving a car, and I do this by way of a detour through the work of Kevin Kelly and Marshall McLuhan. While Rosenberger and Wellner focus first and foremost on the possibilities and impossibilities within the human organism, I seek to add to the debate the however experimental standpoint of the technologies "themselves."

Key words: automobile, cell phone, Kevin Kelly, Marshall McLuhan

Introduction

No two other objects seem to dominate our contemporary urban landscape more than the automobile and the cell phone. It is therefore ironic that the combination, in use, of the two appears to engender so much trouble. The empirical observation that talking on the cell phone while driving is unsafe almost comes as a shock to us who are so fascinated with both our four-wheeled friend and radiation-emitting companion. But it doesn't come as a surprise. We can very well imagine and understand how the combination could create life hazards. But aren't we deep in our hearts affronted by the apparent incompatibility of two of our most beloved artifacts? It's as if technology has let us down.

I propose to add exactly a pinch of this affront to the arguments on the matter put forth by Robert Rosenberger and Galit Wellner. For beyond the (important) question of attention hovers the issue of expectation—expectation, to be precise, in a general existentialist sense. What do we expect from our technologies, what do we want from them? Why would we even *want* to drive a car and use a mobile phone at the same time? Obviously this question is bound to evoke some quite trivial answers. We presumably all know why we are doing it at the moment when we are doing it: because of some urgency, to win time, or just because we find it "natural" to simultaneously drive and talk. The question however becomes much more interesting as soon as we also take the technologies themselves into account, literally. What precisely in or about these technologies dovetails with our needs and desires?

In an attempt to transcend the level of "mere" human experience, we might ask, somewhat playfully: how do the *technologies* actually "feel" about it? In what follows, I explore this experimental question by reviewing some—admittedly, heavily contested—concepts in the work of Kevin Kelly and of Marshall McLuhan, respectively. I find, subsequently, that although the former's position has roots in the latter's, at least at one crucial point of divergence between the two surfaces in relation to the problem at hand. And this difference, at last, will be able to shed some light on the issue.

"What Technology Wants"

"What does technology want?" is one of the key questions in Kelly's thoughtprovoking *What Technology Wants* (2011). The underlying premise of that question, of course, would be the presupposition that technology is, as such, able to want something. Kelly buttresses this claim by arguing, like others before him such as, for instance, Paul Levinson (1997) have done, that the development of technology is evolutionary in nature. In that sense it "wants" something. But Kelly goes a couple of steps further. He sees technology as in all respects similar to *life*. This is also the reason why he proposes a new term for it: the "technium." And he makes the central point that although the technium stems from us humans, it is now beginning to have an existence and an autonomy partly independent from our control. It is "maturing into its own thing" (Kelly 2011, 12).

But, crucially, this entails that we should *treat it as life*. "The technium is now as great a force in our world as nature, and our response to the technium should be similar to our response to nature" (Kelly 2011, 17). In this context Kelly proposes a way of doing—once again akin to a notion of Levinson, i.e., "remediation" (Levinson 1997): all problems that the technium as life form poses, can only be countered by way of the technium itself. Walking away from it is not an option anymore. "If all technology—every last knife and spear—were to be removed

from this planet, our species would not last more than a few months. We are now symbiotic with technology" (Kelly 2011, 37). Hating technology, Kelly remarks, comes down to self-hatred. At the same time we should realize that we are dealing with an autonomous life form. And the evolutionary process in which that life form is involved, Kelly subversively claims over and against most orthodox interpretations of natural evolution, has a certain *direction*. The direction is "what technology wants." "This direction introduces inevitabilities into the shape of life. These nonmystical tendencies are woven into the fabric of technology as well, which means certain aspects of the technium are also inevitable" (Kelly 2011, 103).

And what does technology want, precisely? The same as life. It has recently been discovered, Kelly avers, that life evolves towards a certain set of recurring patterns. "The technium will tend toward certain macroforms, even if you rerun the tape of time" (Kelly 2011, 181). Kelly calls this "exotropy," i.e., the reverse of entropy. It is a progression towards more efficiency, opportunity, emergence, complexity, diversity, and specialization. In general, technology is about furnishing "chances," about increasing opportunities:

The technium is the accumulation of stuff, of lore, of practices, of traditions, and of choices that allow an individual human to generate and participate in a greater number of ideas. . . . While we amass possibilities, we do so because the very cosmos itself is on a similar expansion. (Kelly 2011, 351)

Yet the difference between the evolution of the technium and natural selection is that in the case of technology, adaptation is not unconscious. As suggested, we as humans can intervene in the process by way of political action and decision-making; Levinson would say that we humans fulfill the role of selectors (1997). "At a macroscale, the technium is following its inevitable progression. Yet at the microscale, volition rules" (Kelly 2011, 187). Taken together with what Kelly describes as the legacy of technological history—older designs influence new ones—we can say that, in the end, three factors determine the technium's evolution: "what technology wants," "the gravity of the past," and "society's collective free will."

Of course, my rendition of Kelly's thought here is much too brief to sufficiently honor the subtlety of his discourse. It could seem that Kelly sets out to defend a kind of one-sided techno-enthusiasm, which is absolutely not the case. Even though technology must be seen as a "living force," he argues, not all of its outcomes should be heartily welcomed. In that regard he distinguishes between technologies' "primary" and "second-order effects." Most of the time, when a technology is in its infancy, only the primary effects are visible; but further along the road second-order consequences start to appear, those often being not so positive. With regard to the automobile, for example, Kelly points out—with Isaac Asimov—that before the invention of the "horseless carriage," it was easy for people to imagine such a thing and what it would do, but much harder to also envision unwanted side effects such as traffic jams and road rage (Kelly 2011, 251–52). At this point, ideally, we should turn our attention to McLuhan.

McLuhan's "Mechanical Bride"

The side effects of technologies are exactly McLuhan's main concern. And, McLuhan has said a thing or two about the "horseless carriage." There are some similarities between McLuhan's and Kelly's thinking. Kelly refers to McLuhan's idea of "extension"—all technologies are extensions of human body parts or senses—as partially related to his "technium" notion (Kelly 2011, 44). Conversely, McLuhan's thought can retrospectively be seen to harbor a number of "proto-Kellian" suggestions: for instance, the hint that technological development is evolutionary in nature, or the idea that some "acting force" originates in technology itself (often-rightfully or not-confused with technological determinism). But in relation to the discussion at hand, an important discrepancy between the two views can be spotted. For McLuhan draws a conceptual-ontological distinction between "driving" and "phoning" that Kelly does not make. In fact, on the whole Kelly does not specifically address either of those two activities in the way McLuhan does. The latter even names his first book, however poetically, after the automobile: The Mechanical Bride (2002). But probably the most interesting analysis of the "motorcar" can be found in Understanding Media (2001). It sits there, moreover and not unimportantly, on a par with a discussion of the telephone. And as said, McLuhan's respective evaluations of the two diverge in a crucial manner.

The "motorcar" is generally perceived by McLuhan as an almost obsolete technology, one that has ruled over our lives and society for quite some time, but is now being superseded by another dominant technology, namely, "electric technology," i.e., electricity, telegraph, telephone, television et cetera. Those will soon dethrone the automobile and "return us to the pedestrian scale" (McLuhan 2001, 237). This does not mean that the car will disappear. "It means only that, like penmanship or typography, the wheel will move into a subsidiary role in the culture" (ibid., 240). What is changing then? According to McLuhan, the automobile can be said to be a textbook example of "Gutenberg technology," that is, a mainly

"visually" oriented technology, aimed at uniformization, fragmentation, linearity and repeatability—or put differently, a clear product of the industrial era. But nowadays, McLuhan claims, we are starting to breathe another sort of atmosphere. The tension between these two clashing "environments" is beautifully depicted in this longer quotation:

The motorcar ended the countryside and substituted a new landscape in which the car was a sort of steeplechaser. At the same time, the motor destroyed the city as casual environment in which families could be reared. Streets, and even sidewalks, became too intense a scene for the casual interplay of growing up. As the city filled with mobile strangers, even next-door neighbors became strangers. This is the story of the motorcar, and it has not much longer to run. The tide of taste and tolerance has turned, since TV, to make the hot-car medium increasingly tiresome.¹ (McLuhan 2001, 244)

The telephone, by contrast, is *not* a visual medium (just like TV according to McLuhan is not a visual but a "tactile" medium). With the telephone, "there occurs the extension of ear and voice that is a kind of extra sensory perception" (McLuhan 2001, 289). It is, in turn, a prime example of electric technology, demanding involvement, participation, "all-at-onceness," a more "holistic" approach, so to speak. "The phone is a participant form that demands a partner, with all the intensity of electric polarity" (ibid., 292). It creates and requires intimacy.

So here, too, we have an account of technology "wanting" something. But in McLuhan's view the car wants something radically different than the phone. "Car" and "phone" for him in a way serve as placeholders for so many other terms that feature in what I choose to call his "central dichotomy," i.e., between visual/content/hot/figure and auditory-tactile/form/cool/ground. McLuhan during his career quickly develops the habit of placing every phenomenon he discusses on either one of those two sides: radio is hot, the telephone is cool; the book is hot, television is cool. But the distinction according to him has "structural" roots, namely, in the human organism. The central characteristic of a medium being either mainly visual or mostly auditory-tactile harks back to its origins in (a) specific sense(s). It is a basal aspect. That also means, simplistically put, that we cannot escape or circumvent the (central) dichotomy: it is there, in McLuhan's view. We are able, as in Kelly's case, to remediate the ills of certain technologies with other technologies. But at the level of the "wanting," at which Kelly sees only an "indifferent" increase of possibilities all across the spectrum, McLuhan perceives a very different basal (ontological) condition for the car and the phone. Their cravings, so to speak, are quite distinct.

Ask the Technology

Let us return now to our starting point: our existential affront with the apparent incompatibility between driving and using the phone, and Rosenberger's and Wellner's arguments about it. Rosenberger, building on an extensive review of existing empirical research, accepts that there's a structural, attention-related incompatibility between the two activities and seeks to further frame and understand it in terms of concepts inspired by postphenomenology. Wellner, by contrast, basing her analysis on a study of different kinds of attention, expects the possibility of humans adapting themselves, i.e., rewiring their brains, to the combination of driving and phoning and hence of dissolving the (essentially temporary) incompatibility. Both situate the core of their argument in the human organism: it is *our* constitution that is either structurally unable or potentially able to combine the use of mobile phones with car driving.

Now the above suggests that we can deploy a similar discussion with regard to the "abilities" of the technologies themselves. Following McLuhan, we would need to assume that there's a structural incompatibility between driving a car and talking on the cell phone, however not with regard to human intention but to human *extension*.² The car technology in itself—as extension—does not get along well with the phone technology in itself. With Kelly, then, we would have to presume that the car and the phone "want" the same thing, namely, what technology wants: to increase opportunities and possibilities. And how could the two be incongruent seen from this perspective? This opposition of views in fact offers an interesting mirror of the discussion between Wellner and Rosenberger. And it makes particularly clear around which axis the debate turns. The disagreement is, in essence, about possibility and impossibility.

But something strange is going on. While Rosenberger's "impossibility" is grounded in much empirical evidence, Wellner's "possibility" can only be a presumption, by definition, for it is a future condition. Conversely, McLuhan's "impossibility" does not seem to be adequately evidence-based, while Kelly has fewer problems in convincingly defending the claim that technology has something to do with amassing "possibilities." Seen exclusively from this angle, Rosenberger's and Wellner's discussion leads to a stalemate. The former posits the empirically observed impossibility of (of course, safely) combining car and phone use. The latter superimposes onto this view the hypothetical possibility, however not pulled out of thin air, of a future compatibility. The former view does not exclude the latter. But the same goes, in fact, and strangely enough, for Kelly's and McLuhan's arguments. The possibilities that one technology enhances may just be or become incongruent with those that another one engenders. Although the automobile and the cell phone both increase possibilities, in the end these two sets of possibilities may turn out to be mutually exclusive—as soon as "primary" turn into "second-order effects." And that, thus, makes Kelly's and McLuhan's views in fact mutually consistent (if we, for a moment, disregard the fact that McLuhan makes an "ontological" distinction whereas Kelly does not do such a thing).

The key element here is, obviously, time. Time may turn impossibilities into possibilities. But the above also illustrates something else that is pertinent in relation to the discussion at hand. This interplay of impossibilities and possibilities must not only be framed in terms of human capacities, but also viewed from the perspective of the technologies themselves—insofar as that is possible, of course. Here, an important connection is to be pointed out to the postphenomenological concept of "technological intentionality" (Ihde 1990, 102–03). Don Ihde deploys the notion to elaborate how technologies may have their very own orientations towards, or "perceptions" of the world. A robot, for example, can be said to "hear" and "see," however in ways that are in a phenomenological sense presumably completely different from human hearing and eyesight. But, Ihde crucially remarks, imagining and investigating these technological ways of "perceiving" can be of help to us in, for one, design. Specifically with regard to the robot's hypothetical "listening" capabilities, he for instance observes that,

for other purposes, precisely this differently structured technological intentionality could well be useful and informative. Such a different auditory selectivity could perhaps give clues to better architectural dampening of sounds precisely because what is repressed in human listening here stands out. In short, there is "truth" to be found in both the similarity and the difference that technological intentionalities reveal. (Ihde 1990, 103)

This reflection dovetails with another one of Ihde's notions, i.e., that of technology's "non-neutral acidity" (Ihde 1993): although technologies cannot be said to have unilinear consequences, in the manner that technological determinism proposes, they also cannot be expected to be wholly neutral, as instrumentalism would have it. Technologies harbor a certain intentionality "of their own," that at least partially escapes human intentionality—and our immediate control.

Nevertheless, McLuhan's as well as Kelly's analyses seem to suggest something more. According to Ihde, technological intentionality must not be seen to reside in the technologies "themselves": it emerges within and through constellations of human-technology relations. McLuhan and Kelly, by contrast, give the impression of situating some capacity-agency, purpose, life, ...?-within technology, or (certain) technologies, that surpasses the concept of intentionality, even in its expanded postphenomenological guise. In employing their views, we run the risk of sliding back into old-fashioned technological determinism. From an orthodox phenomenological standpoint, the positing of some "substantive" acting principle within technology must inevitably lead to nonsense. Indeed, we, who are writing this, being human, can only-again phenomenologically speaking-assume a human's point of view. Since we cannot experience the world "as" a technology, but can only creatively surmise what it would be like-as for instance Ian Bogost does in his Alien Phenomenology (2012)-in truth we are left with educated guesses on "what technology wants," once more, phenomenologically speaking. For in a more structural sense, what technology wants is of course what we want.

Nevertheless, *metaphorically* speaking, we can to a certain extent say, in a McLuhanist or Kellian vein, that once the technology is "out there"-or in McLuhan's words, extended, "uttered," "outered," i.e., externalized-it starts to take on a life of its own. But what could possibly be the advantage of surmising such a peculiar, quasi-independent though nonetheless sufficiently metaphorically defined form of "life" within technologies as such-specifically in comparison to a "purely" postphenomenological perspective that sees no need for such a clearly anthropomorphizing maneuver? One could propose metaphysical reasons, for example in terms of Graham Harman's "object-oriented philosophy," which sees objects as perhaps not endowed with some human-like kind of life, but certainly placed on the same ontological footing as humans; all objects, including humans, have the same ontological status (cf. Harman 2002, Harman 2011). But another, simpler answer may be: it sparks the imagination. This suggestion seems rather quaint, but is, in the context of the philosophy of technology, not trivial. In thinking about technology, we try to understand and systematize the meandering dynamics of technologies through space and time. If we imagined-even only imaginedtechnologies to be able to exhibit the same kind of versatility, capriciousness, or capacity for surprise as humans do, we would perhaps become better in assessing their impacts. And also, most crucially, we would be able to better guess-if only guess-how their current form may relate to one or another of their future forms. In this way, we again arrive at the aforementioned notion of time. For in theoretically allocating more "life" to technologies than is perhaps commonsensically allowed—in postphenomenological terms: in regarding all human-technology relations, hypothetically, as "alterity relations" (Ihde 1990, 97ff.)—we can broaden the scope of imagined possibilities and impossibilities.

Thus, in that sense, returning to the issue at hand, we could say, as McLuhan does, that the possibilities enhanced by the car may bring along exigencies that are-now or in time-irreconcilable with requirements posed by the cell phone. But who knows if a revised version of the one might in the future be better equipped to deal with the other? If one day the use of personal automated vehicles for instance becomes mainstream, we may all safely start chatting via the cell phone behind the wheel again. And what with the reverse? Could another cell phone technology be more compatible with driving a car? It turns out that talking on a hands-free set is just as dangerous as using a standard mobile phone (cf. Rosenberger's paper). So should we then change the "technology" of oral communication? That would probably again require a modification of our brain circuits. Still, let's suppose that part of the problem is the absence of the conversational partner. Could we not design a communication system that instantly creates a hologram of the person calling, placing it in the passenger's seat, and hence dissolving in fact the difference between talking to one's fellow traveler and talking to a person through a communication device?

In order to start seeing these—admittedly, quite science-fiction-like—possibilities, one would need to take the technology "itself" into account; one would need to "ask technology," if only in our imagination. In fact, every debate on possibility and impossibility with regard to technology use already implicitly does this. But in order to specifically mitigate our affront with regard to technological disappointment, with which I started out, it could be a good idea to include the technology as such—however abstract and experimental this may sound—in the conversation. To be sure, we should not do this with the aim of exterminating all feelings of affront. Exactly those feelings are useful in attesting the wider consequences of our technology use. Combined with as wide as possible a scope of imagination—in the best science-fictional tradition—they are just as crucial in the process of mining what we find, deep in hearts so to speak, to be lacking in the technologies that we use. What we may be able to do better. And what we just could "ask."

Notes

1. It should be mentioned that McLuhan, when he speaks about the "motorcar," is talking first and foremost about the "big" American car. And he contrasts the latter— "a hot, explosive medium of social communication"—to the "small" European car, which will have in his opinion a much greater chance of survival in "electric" times (2001, 241). This, in fact, could count as a simple and elegant illustration of the observation that McLuhan is *not* a technological determinist—for there isn't in his view just *one* "automobile technology" that causes this or that well-defined effect.

2. I loosely derive this pair of terms from Paul Ryan, who says that his "approach stems from work with McLuhan that preoccupied me with the problem of how to maintain congruence between our intentions and our extensions." (1974, 50)

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