SPECIAL SECTION:
INTERFACE AND THE POST-INDUSTRIAL SOCIETY

The following four essays are based on a workshop of the German Society for Media Studies (GfM) working group on Interfaces that took place during the annual conference of the GfM at the University of Siegen in September 2018. With six brief contributions – in addition to the papers published here, Sabine Wirth addressed "User Interfaces as 'Personal Tools'" and Sophie Ehrmanntraut discussed the development "from 'Human Factors Engineering' to 'User Centered Design'" – the working group responded to the main topic of the conference: 'industry'.

The fact that the call for papers of the conference gave the current speech of 'industry 4.0' a lot of room corresponded to the currently-held consensus that digitisation is an industrial factor of crucial importance for (social) value creation processes. In the late 1960s and early 1970s, however, the formation and commercialisation of human-computer interaction as a discipline coincided in time with sociological analyses that proceeded from the diagnosis of an end of the old type of industrial society and forecast the emergence of a post-industrial society. Books like Alvin and Heidi Toffler's Future Shock (1970), Alain Touraine's La Société Post-Industrielle (1969) or Daniel Bell's The Coming of Post-Industrial Society (1973) shaped a new understanding of the economic and industrial foundations of capitalism in the dawning age of computerised industrial production. The Tofflers tried to identify basic features of radical innovation in a post-industrial society, Touraine was mainly concerned with the future of the working class under post-industrial conditions and Bell attempted to outline the main features of a historically new value-creation regime that is based squarely on knowledge processes and the circulation of information via technologies of telecommunication. Since its inception, the term "post-industrial society" itself has evolved further into conflicted and widely-discussed notions such as the 'information society', 'knowledge economy' or 'network society.'

Primarily, the workshop examined the historical question what role interfaces (in all their forms) play for the contemporary diagnoses of the post-industrial. The critique of the military-industrial complex, of the technocratic society (Theodore Roszak), of one-dimensional man and the ideology of the advanced industrial society (Herbert Marcuse), of the society of spectacle characterized by passive media consumption (Guy Debord) – these were all issues in the 1960s and 1970s taken up by interface design and the empowerment gestures of computerization (e. g. through 'user-friendly interfaces', 'soft technology', 'intimate computing', the promised flexibility of 'being digital', and participation in egalitarian and meritocratic online communities). While the idea of an imminent or already completed end of industrial society circulated for several decades, interfaces are today a decisive component of computer-based or computer-supported value creation processes, both in the areas of production and consumption. Yet, future rarely comes as predicted. Beyond the hypothesis to consider interfaces as a key technology of post-industrial society, the workshop also reflected on the question in what ways interfaces transcend older

notions of post-industrial societies. The question was raised, in which way these older theories are no longer able to adequately grasp the situation of our era.

Against this background of different notions of a 'post-industrial' society, the respective theories and their advantages and deficiencies, the contributions of the working group discussed the role of interfaces in the development and criticism of a post-industrial society. In the first essay, Timo Kaerlein explores the historical connection between interface design and diagnoses of a post-industrial society. He argues that interfaces have become the equivalent of the assembly line or office workstation of industrial societies by connecting the mobile and flexible knowledge workers to the post-industrial production process. Interface design, if not limited to the field of human-computer interaction (HCI), can even be considered as the central site of value-creation in post-industrial societies, as Roland Meyer argues in the second essay. Focusing on the work of Gui Bonsiepe, he shows how already around 1970 industrial design began transcending the sphere of mass-produced commodities by focussing on the mediating layers between the user's experience and an increasingly complex world of invisible structures and processes. In the third essay, Jan Distelmeyer recalls the advantages of the multi-faceted interface concept, which are particularly evident in the (historical) coupling of the terms interface and conduction. Based on this, he approaches interface politics of post-industrial values by addressing the transition from object orientation to process orientation through the introduction of the iPhone. The fourth essay by Christoph Ernst closes by discussing a scene from Blade Runner 2049 which sheds a light on current imaginaries of the interconnection between coming types of natural user interfaces and their use in 'post-industrial warfare'.

Taken together, the four short essays explore the productivity of focussing on interfaces as central sites of transition between industrial and post-industrial regimes of value creation and organisation. It is here where the social practices of computer use and cultural imaginations about human-technology relationships in digitally networked environments offer themselves to critical scrutiny and historical comparison.

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