

Article

Sensing Urban Manufacturing: From Conspicuous to Sensible Production

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Abstract

Environmental destruction, social inequalities, geopolitical vulnerability—the limits of the long-time praised paradigm of post-industrial cities and globalised value chains are becoming evident, while calls for (re)localising production in cities are getting increasingly vocal. However, the material implications—i.e., where and in which form manufacturing should concretely take place in cities and the consequences on urban space and relations—are rarely addressed in debates on (re)industrialisation. In this article, we engage with the concept of conspicuous production by combining research on mixed-use zones with sensory methodologies. We focus on the multisensory dimension of urban manufacturing to interrogate the spatial possibilities for production in a small town in Switzerland. Together with a group of graduate students, we apply sensory methods to explore how production shapes urban sensescapes and how these sensescapes affect our relation to production. Our exploratory endeavour provides ideas of how sensory methods can be integrated into urban planning research and practice: we suggest that these methods, which necessarily emphasise subjective experience, can constitute powerful tools if they take into attentive consideration the local political and economic context, including the norms and power relations that shape individual perception. Our study sparks critical questions about conspicuous production and mixed-use zoning and tentatively advances the concept of *sensible production*: a production that not only is perceptible and can actively be engaged with, but that also shows good sense, makes sense, and focuses on what we need rather than on appearance.

Keywords

affect; learning to be affected; mixed-use zones; (re)industrialisation; sensory geography; sensory methodologies; small towns; sustainable cities; urban manufacturing; zoning

Issue

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1. Introduction

Making production more visible in cities—what Baker (2017) calls “conspicuous production”—has been advanced as a strategy to revalue manufacturing activities against the post-industrial zeitgeist that has segregated them at the urban margins and displaced them to distant countries and continents. Baker’s proposition is part of a broader reflection that questions the inevitability of deindustrialisation in the cities of the minority world and opposes their framing as

“post-material spaces...that privilege and prioritise services, entertainment and other forms of consumption over the production of material goods” (Dierwechter & Pendras, 2020, p. 2). We acknowledge that, despite the post-industrial narrative, “cities remain spaces of production” (Dierwechter & Pendras, 2020, p. 2); yet, manufacturing is increasingly marginalised in cities’ symbolic and material space.

Name it deglobalisation (Livesey, 2018), reshoring (Vecchi, 2018), or reindustrialisation (Nawratek, 2017a), the idea that communities might be better off if they

can retain, expand, or attract back production activities is gaining terrain over the frenzy of the creative city, contributing to the revaluing of manufacturing (Smith, 2023). However, the material implications of this idea for urban space and everyday life must still be assessed, especially the question of *where* exactly production should take place and *in which form*. A lively debate has emerged on the advantages of mixed-used zones where industrial activities cohabit with other land use types, in opposition to the segregation approach of modernist zoning practices (Roost & Jeckel, 2021). Whereas the functional aspects of such cohabitation are central to most studies, its affective and sensory dimensions are rarely addressed. How manufacturing shapes urban sensescapes and how people experience, perceive, and make sense of the city and manufacturing itself remains largely unexplored.

Baker's concept of conspicuous production has the merit of attracting attention to the materiality of urban manufacturing in its visual appearance. Yet, other senses remain—almost literally—out of the picture. This article expands the debate by focusing on other senses beyond the visible, drawing on the rich tradition of urban studies applying sensory methods, which have however rarely addressed questions about manufacturing. By bringing our bodies where things are produced, we look for new connections to manufacturing in contrast to the disconnecting effect/affect of zoned urban experiences. In a process that Roelvink (2020) calls “learning to be affected,” we pay attention to the material dimension of manufacturing through our bodies and, thereby, learn to care for it. Along with Gibson-Graham et al. (2019, p. 2), we aim to shift the way we look at manufacturing from seeing it as part of the problem to framing it as an entry point for the radical transformation of our cities. This approach can then serve as a basis to reflect on what *place* (literal and metaphorical) we wish to reserve for manufacturing within our communities.

We focus on Mendrisio, a small industrial town in Southern Switzerland, where the proximity of manufacturing activities to other urban functions is almost inevitable, given the limited spatial extension of the city. The empirical material we draw upon emerged in the framework of a laboratory course during which the authors and a group of graduate students conducted sensory research in Mendrisio. Our research design was exploratory and intended to inspire reflections around conspicuous production in relation to urban (re)industrialisation and zoning practices. Our observations, even if limited in scale and scope, warn against generalisations that risk stigmatising or romanticising urban manufacturing.

We suggest that making production visible—or, as we prefer, *sensible* in the sense of “perceptible to the senses” (Sensible, n.d.)—should not be seen as an ultimate solution per se. Instead, first, the diverse material and sensory qualities of different types and components of production must be carefully considered when plan-

ning to (re)integrate production in cities. Second, our experience in Mendrisio raises the question of whether spatial urban design alone can be held responsible for transforming our relation to production and, ultimately, unequal and unsustainable production and consumption habits. We believe that *sensible* production—production that, in the first sense of the adjective, shows “good sense [and] reason” (Sensible, n.d.)—must not only be passively perceived but also actively engaged with spatially, sensorially, and politically.

This last observation points to the limits of sensory methods that focus exclusively on individual perception without seriously embedding it into political, social, and cultural context. Our relatively circumscribed experimentations can provide ideas for integrating sensory methodologies in planning for urban manufacturing more extensively and systematically. Sensory methods can represent a powerful starting point for a deeper engagement by urban communities with manufacturing. This engagement should also include questioning, reflecting, discussing, and possibly rethinking the meaning and *sense* of production in our societies.

In the following two sections, we present the conceptual basis of our research. Section 2 contextualises urban manufacturing in the tension between the post-material paradigm of post-industrial cities and the call for urban (re)industrialisation. Section 3 discusses sensory approaches in urban studies, emphasising their potential for reshaping (affective) relations to production. The context and methodology of our study are presented in Section 4. Section 4.1 provides an overview of Mendrisio's industrial transformation, while Section 4.2 specifies our methodological approach, introducing the main observations that emerged from our fieldwork. The last two sections of the article discuss these observations in relation to conspicuous production and their implications for urban planning.

2. Production and the City

It is undeniable that the exodus of production from cities of the minority world (and, in different terms, of the majority world; see Pike, 2022) has exacerbated social inequalities in the last half century (Massey & Meegan, 2014; H. McLean, 2014). The fragmentation of production networks across the globe has not only accelerated environmental degradation but also increased their geopolitical vulnerability. Against this backdrop, (re)localising production appears as a necessity for sustainable and resilient economies. In addition, reintegrating (or maintaining) production in cities provides quality jobs and career opportunities for workers with low education and thus counters the social polarisation produced by creative cities (Dierwechter & Pendras, 2020). In this line, Edwards and Taylor (2017) insist that localised production should be an integral part of progressive urbanism, of “an inclusive city, a city for all its residents” (Nawrotek, 2017b, p. 16).

Baker's reflections on conspicuous production highlight the relational dimension of the (re)industrialisation debate. Paralleling the more popular notion of conspicuous consumption, conspicuous *production* invites overcoming the stigma currently attached to manufacturing (see Bryson et al., 2015) and instead seeing it as something to be proud of. In addition to the more obvious environmental, social, and geopolitical rationales for localised production, Baker (2017, p. 120) insists on the necessity to nurture more meaningful "connections between consumers and producers of manufactured goods" through "a built environment that explicitly prioritises public connections to industry." This would increase mutual respect and reciprocal recognition between producers and consumers (Baker, 2017, p. 121).

The connections Baker emphasises are materially embedded in and shaped by the urban space. More localised and more visible production can strengthen these connections. It can also counter the sanitised environment of post-material cities (Dierwechter & Pendras, 2020), add vitality to city life, and improve the legibility of urban space (Baker, 2017, p. 122). By recognising this material embeddedness, Baker (2017, p. 117) takes the often-overlooked "spatial implications of re-industrialisation" seriously. If production should stay in or return to town, how should it *materially* relate to the urban space and other urban functions? Baker (2017, pp. 123–126) suggests two complementary directions: a higher mix of land uses and a more open design of individual buildings.

Exclusionary zoning, where urban functions are separated into designated areas, established itself as a planning principle in the early 20th century in North America (Hall, 2014). This principle found support in functional models like those by Von Thünen and later Burgess, which theorised the spatial distribution of urban activities as a function of land costs and thereby offered a tool to optimise (in economic terms) land use in cities. While zoning promised to protect the health and life quality of residents from the dangers and nuisances of industrial activities, it also provided a powerful tool to control selected population groups (Wilson et al., 2008) as well as to protect the economic interests of investors and higher classes (Fischel, 2004).

Due to the exclusionary and environmental effects of zoning, the opposite idea has gained popularity recently. The principle of integrating different land uses in mixed-use zones has become widely accepted in urban planning today, to the point that it is often presented as a panacea for urban social and environmental challenges and towards more vibrant and safer cities (Hirt, 2016). However, implementing the mixed-use principle in practice is challenging and commonly privileges other uses than industrial ones (Ferm & Jones, 2016; see also Hirt, 2007; Ryckewaert et al., 2021). The stigma on manufacturing, framing it as a nuisance, suits the interests of real estate speculation, which drives manufacturing to the

urban margins or outside the city. In the process of industrial gentrification, mixed-use regeneration often means displacing manufacturing to make space for housing and other more profitable uses (Ferm & Jones, 2016), to the point that Ferm et al. (2021, p. 352) suggest that exclusionary zoning might represent a necessary strategy to preserve industrial activities in cities.

The scarce research on the materiality of (re)industrialisation (for some examples, see the contributions in Million & Bentlin, 2021, and Nawratek, 2017a) emphasises the need to differentiate between types of production and to consider their specific spatial needs and impact in planning and design. Mixing of uses can happen at different scales—from neighbourhood to the building level (Roost & Jeckel, 2021) and even within the home (Bryson et al., 2017)—and can show different degrees of integration—from separation to symbiosis (Ryckewaert et al., 2021). The highest degree of integration might not be adequate, or desirable, for all types of production and urban space. Instead, planning policies and design should be adjusted to the peculiarities of each context, developing "clever solutions for shared spaces" but also, when needed, "careful design of separation between uses" (Ryckewaert et al., 2021, p. 346).

Rare studies examine the relational and affective effects of manufacturing's material presence in cities. Ferm et al. (2021, p. 355) demonstrate that "spatial morphologies of urban manufacturing" shape "the wider relations between manufacturing and the city." Different building configurations result "in tighter or looser urban tissues" (Ferm et al., 2021, p. 355), leading to varying possibilities for engaging with manufacturing. Large industrial estates and inward-facing redevelopment projects produce "a very formal urban environment" and a "clear separation between private and public space," hindering a sense of community (Ferm et al., 2021, pp. 360, 362). In contrast, outward-facing morphologies, with direct access from streets and open spaces, create a permeable and transparent urban environment. Baker (2017, p. 125) proposes that these qualities be achieved through "open windows, large doorways and opportunities for signage."

Production activities in cities inevitably shape not only real estate patterns and the relationship between producers and consumers but also how people perceive, make sense of, and understand both manufacturing and the urban space. While Baker's proposition focuses, as the few other existing studies, on functional and visual elements of industrial buildings, our contribution seeks to include other senses in these reflections and to emphasise their affective dimension more explicitly. Therefore, we turn now to sensory methodologies in urban studies.

3. Sensing the City

In the last two decades, there has been a growing interest in the role of senses in shaping human experience (Pink, 2015, p. 3), including in urban studies (Adams &

Guy, 2007). This interest corresponds to increased attention to the materiality of social life in general and of cities in particular. This attention emerges from acknowledging that our experience is necessarily embodied and emplaced; it addresses nonhuman agency and “the idea that the sensory and material context of the city also acts on us” (Pink, 2007, p. 62).

Throughout history, cities have been viewed as places with abundant sensory stimuli (both attractive and repellent) that must be controlled and governed. This control often implies displacing, fencing off, and eliminating sources of repugnant and unpleasant sensory elements. The zoning of industrial activities (often together with working-class housing) in the peripheries of cities can be seen as a strategy to screen off bad smells, noise, and ugly sights from the modern city while simultaneously demarcating class boundaries (Urry, 2011, pp. 353–354). The senses thus constitute a crucial component of spatial exclusion in cities, as Low’s (2015) work on the role of olfactory differentiation in the segregation of racialised groups also shows.

A variety of methodologies, including sensory ethnography (Pink, 2015), walking (Springgay & Truman, 2017), and mapping (K. McLean, 2020), contribute to better grasping the role of senses in shaping urban experience and inequalities and to improving the sensory quality of cities (Maag & Bosshard, 2016). The potential of sensory methods and design is often mobilised concerning place-making, memory, and history (Low, 2010). To mention an industry-related example, Brennan’s (2010) sensory historical walks in Loughborough (UK) follow the route—a sort of pub crawl—of a group of Luddites who attacked industrial machines on a night of 1816 (see also Pink, 2015, pp. 183–184).

The potential of sensory methods still needs to be explored in connection to the present and future of urban manufacturing. Not surprisingly, when attention is paid to the sensory dimension of contemporary industrial activities, it is usually in negative terms. For instance, Ryckewaert et al.’s (2021, p. 341) study mentioned above considers five dimensions of environmental impact within mixed-use projects: “visual relationship, noise reduction strategies, smell avoidance strategies, access routes and loading arrangements.” Manufacturing is framed here as a nuisance to the (sensory) urban experience.

While we do not intend to downplay the nefarious impact of acoustic, olfactory, and visual emissions caused by industry, we propose a more open consideration of how manufacturing shapes urban sensescapes today and how it could shape them in the future. We follow Roelvink’s (2020) take on Latour’s (2004) original concept of *learning to be affected*. We understand affect “as a non-ideological force that works through bodies,” and that confers them the capacity “to move and be moved by the world in some way (to affect and to be affected)” (Roelvink, 2020, pp. 428–429). This capacity depends on other bodies and can be reinforced through

practice, as Latour’s (2004) famous example of the perfume kit enhancing the pupil’s ability to distinguish different smells suggests. Crucially, learning to be affected generates “shifts in the capacity for action centred on caring for others” (Roelvink, 2020, p. 431). In other words, the more we pay attention to bodily sensations (i.e., how our body is affected by the world surrounding us) and the more we care for these sensations, the more possibilities for action will be available.

With our laboratory, we wanted to create a space where we could learn to be affected by urban manufacturing in Mendrisio. We intended to discover together how this process would change us and our relation to manufacturing; what new connections, awareness, and sensibilities it would nourish; and what our personal and collective experience could teach us about (re)industrialisation and urban planning.

4. Exploring Sensory Manufacturing

4.1. Manufacturing in Mendrisio

Mendrisio’s location (population: 16,000 inhabitants), at the Southern edge of the Alps and bordering Milan’s metropolitan area, has proven historically favourable for manufacturing. The first proto-industrial activities comprised small spinning mills, shirt factories, and dyeworks along the stream that once ran through the town centre. The connection to the railway in 1874 drew the town’s expansion, including further textile and light manufacturing industries, from the centre downhill—a process further accentuated by the inauguration of the highway in the 1960s. The valley floor, especially the area between the highway and the railway (called Piana di San Martino), has experienced an impressive acceleration of construction, especially since the 1980s: infrastructures, industrial and commercial buildings, as well as, in the mixed-use zone, residential units (Figure 1). Today, Mendrisio presents a diversified industrial landscape ranging from pharmaceuticals to metal manufacturing, through the textile and chemical sectors (Mayer et al., 2023). Most enterprises are small- to medium-sized and part of international conglomerates; they produce highly specialised intermediate or capital goods for export, such as rubber profiles, refined gold, zippers, or steel cables.

The modalities of this development have fed resentment among the local population, which has only partially benefitted from it (Mayer et al., 2023). Local enterprises (both in the secondary and tertiary sectors) have traditionally employed numerous cross-border workers from Italy, leading to wage dumping. Air pollution frequently reaches alert levels, and traffic congestion is constant during peak hours. Unregulated development of the valley floor has disorderly replaced fields with sheds and roads, leaving little space for leisure areas and green spaces (Figures 2 and 3). The industrial sector faces criticism for environmental issues and working

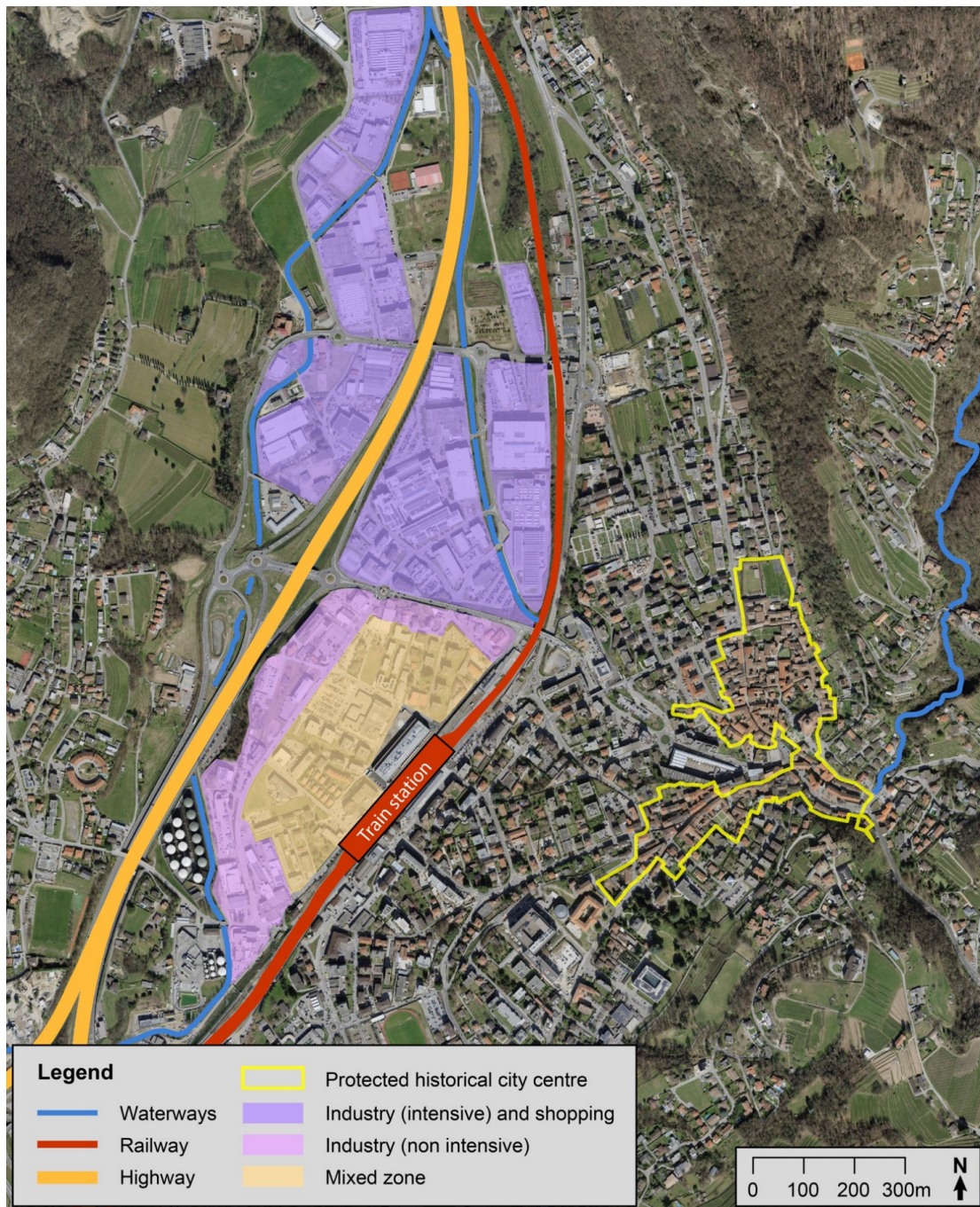


Figure 1. Map of Mendrisio. Orthophoto courtesy of © Swisstopo, modified by M. Kummert after Ufficio Tecnico Comunale, Mendrisio.

conditions, even though commercial activities also contribute to these problems.

Mendrisio’s industrial zone is relatively small and close to the town centre, with many enterprises situated near the train station in the mixed-use zone. Contrary to Baker’s argument, however, the visibility and the proximity of manufacturing to other urban functions—features of conspicuous production—seem to intensify resentment against the industrial sector rather than fostering a positive connection to it. As detailed in the next section, our laboratory aimed to explore this tension from a sensory perspective.

4.2. Sensory Research in Mendrisio

We conducted sensory research with 11 graduate students in the framework of a laboratory course in economic geography at the University of Bern, Switzerland, during the Spring term of 2023. The overall methodological approach of the course, deliberately open and exploratory, was rooted in sensory ethnography and auto-ethnography (Pink, 2015). Drawing on feminist epistemologies, we considered the body not a research object but a research tool that produces knowledge through its presence in space (Landrin, 2022). After



Figure 2. A view of Mendrisio's Piana di San Martino. Photo by the authors.

an initial phase in which we established a common conceptual framework, the students developed group projects to explore the multisensory dimension of manufacturing in Mendrisio. Fieldwork took place over three days in April 2023. We started with a collective explo-

ration of the Piana di San Martino; then, students conducted field research for their projects and had informal exchanges with a few local actors. We regularly integrated moments of mindful meditation and soft mobility exercises throughout our stay in Mendrisio to connect



Figure 3. Collage of pictures from Mendrisio's industrial zone. Photos by the authors.

to our body and enhance our attention and sensibility. During the term, students held a personal journal to track the transformation of their relationship to manufacturing and urban space.

For the collective exploration of the industrial zone, we used a combination of embodied methods (Figure 4):

- 1) A blind walk (Waxman, 2017; Zawadzka, 2022). In pairs, students walked with a blindfold guided by their partners and later drew a map to document their experience. The uncommon condition of this first walk in the area intensely affected many participants, as the sound of passing cars challenged their sense of security.
- 2) A body mapping (de Jager et al., 2016; Jokela-Pansini, 2021). We marched through the area in silence, focusing on our bodily sensations. We then drew a downsized contour of our bodies to collect, organise, and communicate our feelings.
- 3) A poetic inquiry (Faulkner, 2017). During an additional walk, students noted down words that came into their minds and shared them with the group afterwards. They then selected five words among those mentioned by their colleagues and wrote a short poem entailing the five words. Writing with the words of others enhanced the interconnectedness of our collective experience.

For their group projects, students applied a variety of methods:

- Group A combined acoustic and visual methods to compare the external appearance and soundscape of selected enterprises with fictional representations of what might be seen and heard within the buildings, integrating these elements into a Story Map. They pointed to the perceived lack of transparency produced through visual elements and the homogeneity of soundscapes dominated by the noise of ventilation systems and motorised traffic.
- Group B used audio recordings and a self-questionnaire to compare the subjective perception of the soundscapes in the mixed-use zone and a purely residential area, visualising the results with colour-coded treemap diagrams. They emphasised the impact of motorised traffic on their perceptions and the variable contextual meaning of sounds.
- Group C explored the relationship between nature and industry by producing a sensory map of a walking path along the river that flows through the area. They, too, noted the predominance of cars (mainly connected to a big shopping mall) in the sensescapes. Yet, they were simultaneously surprised by the quietness and cleanliness of the area

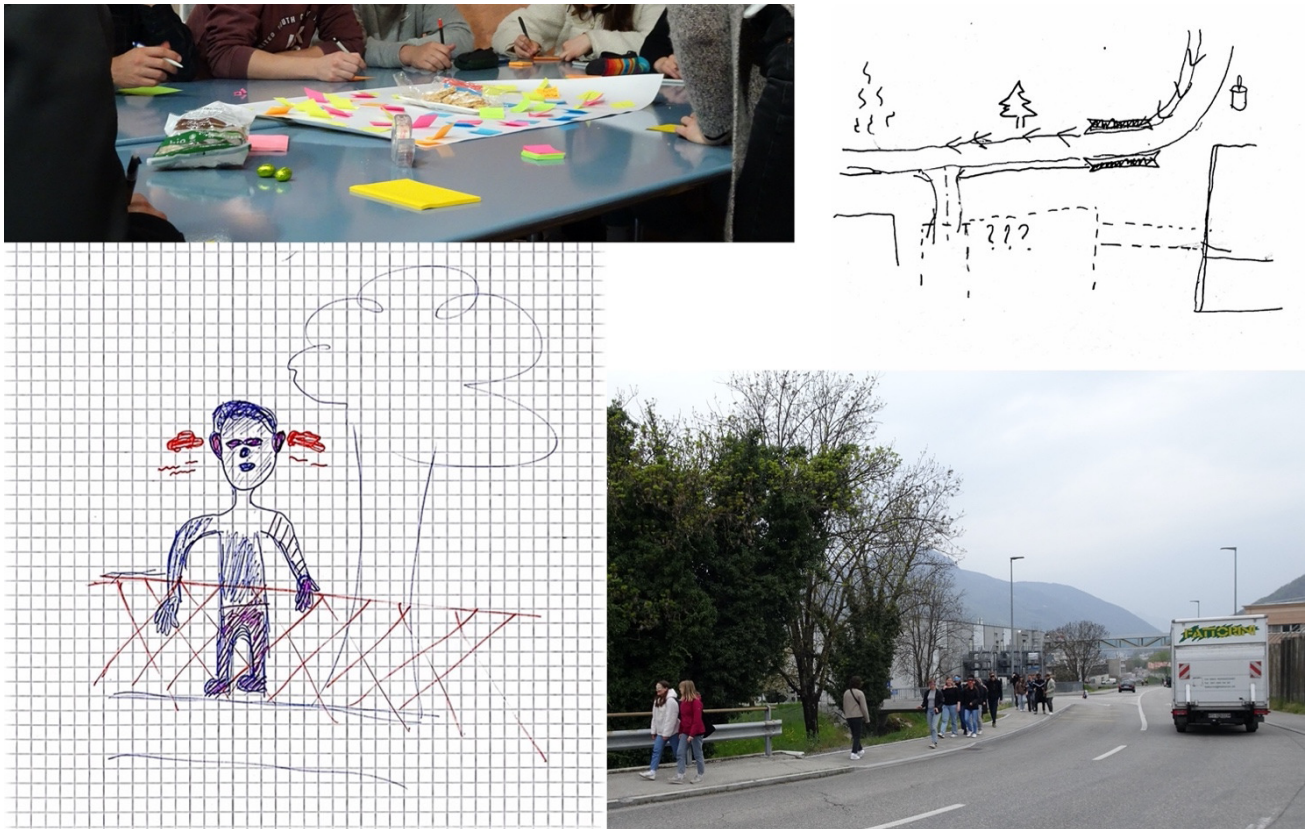


Figure 4. Collage of sensory explorations in Mendrisio: poetic inquiry, (body) mapping, blind walk. Photos by the authors, drawings by the participants.

(apart from traffic) and the (positive) impact of natural elements on their sensory experience.

- Group D let themselves be guided by their senses in free sensory walks, recording and analysing all sensory encounters along the way and synthesising them in a visual-acoustic-olfactory installation. Their analysis called attention to the role of prejudices in shaping sensory experiences and reinforcing biases. The students noted that because they had a negative image of the industry from the start, their sensory attention tended to be attracted by negative elements (the sight of garbage, the noise of the ventilation system, or the stink of exhaust gases). Only after actively training their senses could they perceive more pleasant elements, such as the smell of wood from carpentry or birds singing.

The insights generated by the groups mainly confirmed what had emerged during the collective exploration. Methodologically, we noticed that a strong focus on one sense simplifies the analytical work but at the same time contradicts the actual experience, which is necessarily multisensory and charged with emotions that shape the perception of place (Howes, 2004). Concerning the sensescapes of manufacturing, the main observations pointed to their homogeneity and uniformity; the lack of spatial, visual, and sensory transparency; the sensory predominance of motorised mobility; and the incoherence and contradictions within sensescapes, especially concerning natural elements. We realised that all this limited our ability to read the place and affectively engage with manufacturing.

Negative preconceptions further limited this possibility. The whole group had a substantial prejudice against the industry as something inherently loud, polluting, ugly, and smelly, as it had emerged in a creative writing exercise in the first session of the laboratory. The experience in the field did not fulfil these expectations as the industrial site turned out to be calm, clean, and not very impactful on the senses, despite the heavy motorised traffic. Nevertheless, students mostly maintained a rather negative image of manufacturing as they interpreted the lack of sensory transparency as a sign of some guilt. The fences, walls, no trespassing signals, monotonous noises, and interactions with security staff surprised some students, who described the atmosphere in the area as hostile and suspect—as if enterprises had something to hide.

5. From Conspicuous Production to Sensible Production

5.1. Interrogating Conspicuous Production

Our exploratory work in Mendrisio opens up several questions on conspicuous production and, more generally, on the presence of manufacturing in cities. We join

here Ryckewaert et al.'s (2021) call for differentiating between various degrees of integration of functions. Yet, we broaden their point to consider the diversity of production forms and elements, their impact on sensescapes, and their differing potential for meaningful sensory experiences. The sensory approach of our research accentuates the wholeness of experience in space, rather than just the visual field, as crucial in influencing the perception of industrial activity.

As noted above (e.g., Ferm et al., 2021), it is essential to maintain a nuanced stance and ask *what is visible* (and perceptible in general) and *how*. Mendrisio's industrial area is within walking distance from the city centre and includes a mixed-use zone. While this proximity could contribute to conspicuousness, our experience suggests that more than this is needed to render the industry approachable. The heavy traffic generated by the busy shopping mall negatively affected our sensory experience in the area. Additionally, the few perceptible elements of manufacturing created a sense of opacity rather than conspicuousness. Fences, often designed to prevent interaction with the street or intentionally used by manufacturers to avoid public scrutiny, contradicted the principle of conspicuous production. Students perceived these elements, along with other sensory aspects like monotonous ventilation noises, as fostering a sense of hostility and mutual mistrust.

We should also differentiate *what is produced* and *how*. Indeed, as indicated by Baker, small-scale craft production can be easily integrated into urban centres. However, focusing on these kinds of activities risks romanticising production and making other, more invasive forms invisible, which are still necessary for our well-being, at least to some extent. The type of production performed in Mendrisio, and even more the heavy industry usually segregated outside cities, might not be pleasant to see (or hear or smell). The paradox is that if only selected elements are made perceptible from the outside, there is the risk of sanitising the image of a process that might be better known in its entirety if it is to be valued more realistically.

Furthermore, for production that, like in Mendrisio, is oriented towards intermediate or capital goods rather than consumer goods, the question arises about the possible abstraction level in the conspicuous production concept. Even if a rich sensory encounter with the production process is possible, the manufactured product might be out of the imaginaries of everyday life. It is thus questionable whether it is feasible to raise consumer awareness when the product's linkages to lived experience are rather complex, intangible, and embedded in highly specialised production chains.

More generally, our experience in Mendrisio exhorts us to consider the specificities of each type of production not only within its unique spatial and material context but also its social and cultural one. How different sensory elements of production are perceived and valued depends strongly on local historical trajectories, norms,

and, not lastly, power relations. Our reflections and most of the literature we draw on emerged in the context of de-industrialising or still-industrialised cities of the minority world: in other contexts, integrating production in the urban fabric to make it more perceptible might have very different effects. In the case of Mendrisio, the resentment emerging from the social and environmental problems of the last decades of economic transformation certainly influences the possibilities for openly engaging with, sensing, and caring for the local manufacturing and industrial area (Mayer et al., 2023). Initiatives limited to increasing the visibility of manufacturing and improving the industrial sensescapes through planning tools but not tackling broader structural conditions (for instance, through stricter regulation of working conditions and environmental impact) would constitute, we believe, an ineffective exercise. In the worst case, it could lead to industrial gentrification, as it often happens with redevelopment projects (Ferm & Jones, 2016) and greening interventions (Curran & Hamilton, 2020; McKendry & Janos, 2015).

5.2. *The Effects/Affects of Sensing Production*

Our project revealed the potential of combining conspicuous production with sensory methods for reinforcing our sensitivity and mindfulness towards (in other words, our *care for*) production processes. During the term, students realised how disconnected they were from the process of making things. In their reflective assessments, they expressed a newfound awareness about manufactured goods and the manufacturing sites in their towns. A student even stated that:

Often, when I use a zipper now, the fine sounds of the sewing machines from the open window flash in my mind, but also thoughts about the problems related to the industry in Mendrisio, especially the heavy traffic and the harsh working conditions.

Notably, this heightened consciousness emerged despite the absence of intentionally designed conspicuous production and direct insights into the manufacturing processes during our fieldwork. This raises the question of whether Baker's goals on conspicuous production can be reached predominately by social processes rather than urban design. In fact, it was rather the collective effort to think and feel together that transformed our relation to production. This resonates with Anderson's (2014, p. 102) observation that learning to be affected is always a collective process since "affect is transpersonal [and] formed through encounters and relations that exceed any particular person or any particular thing." Group discussions, readings, and on-site meetings with local actors were essential to making affective processes possible.

At the same time, the collective character of these processes resulted in the crystallisation of some perceptions and interpretations—especially negative ones—

partially limiting the full expression of individual experiences. This was true in particular regarding the impact of preconceived images of, and attitudes towards, industry. Some students timidly described changes in their prejudices about manufacturing, acknowledging the pluralism of possible forms of production. However, this differentiation was not a rule for the whole group, and the industrial imaginaries of most students maintained a negative—if transformed—connotation. While their initial image of the industry was about loud noises and bad smells, at the end of the course, it shifted to monotony, hostility, and mutual mistrust—all feelings that strongly influenced our collective reflections.

Our positionality shaped the way the sensory experience in Mendrisio affected us. Students (all from Northern Switzerland) arrived in the town with an idyllic image of Southern Italian-speaking Switzerland as a holiday destination praised for its charming natural landscapes and picturesque architecture. As economic geography students, they were generally concerned and engaged in sustainable regional development and more attuned to the working culture of services than of the industrial sector. This combination probably resulted in participants focusing mainly on the negative components of their experience in Mendrisio.

Without a doubt, the results of our exercises would vary significantly with different groups and in other contexts. In spring 2023, Ottavia conducted two sensory walks in the same area with local teenagers, which included information on local history and development. Participants had similar prejudices about the industry and even stronger ones about the site, where most had never lingered despite passing by regularly. While environmental concerns about production remained, pride emerged as they discovered previously unknown elements of the place's history and materiality. Hatzold (2023) conducted sensory bike tours in a traditionally industrial valley in Central Switzerland with local architects and planners who had already been engaged in the preservation of local industrial heritage. Like our students, Hatzold's participants noted the lack of sensory transparency and readability of industrial spaces on their route. However, this observation raised their curiosity and the desire for more profound encounters with production sites and processes.

Positionality, including prejudices, is pivotal for the perception of space. Degen and Rose (2012, p. 3283) define the difference between the perception of places and the sensory experience of them as a "paradox." They remark that "memories of other places can entail judgements that can be very negative in relation to [another place] and thus disengage an individual from full sensory immersion in the urban environment" (Degen & Rose, 2012, p. 3282). In our case, the judgements and prejudices of students were not necessarily rooted in their embodied memories but in cultural imaginaries of industry strengthened by the pressure of the group. As Gibson-Graham and Miller (2015, p. 9)

observe about hegemonic discourses on the economy, such imaginaries:

Literally [make] sense—transforming our sensual perceptions and experiences, altering the material and conceptual conditions of possibility for our identifications with others, and changing our abilities to see, think and feel certain inter-relationships and the responsibilities that come with such experiences.

Our prejudices and negative cultural narratives about industry reduced the sensory feel of the researched area and the possibilities to be affected by it. As in Hatzold's case, positive biases might also prove problematic if they limit the opportunities to critically scrutinise our inter-relationships and responsibilities by delivering romanticised images of manufacturing. When engaging in such exercises, it is thus crucial to reflect openly on our positionality and background if we want to nurture more meaningful and honest relations to manufacturing, as advanced by Baker.

Furthermore, establishing a connection between localised sensory experiences with a critical place inquiry and broader environmental, political, or cultural discourses on industrial production posed a significant challenge for students. This might be a constraint of sensory methodologies themselves, as they risk focusing instead on “the micro and yet universal level while ignoring the situated realities of historical and spatial sedimentations of power” (Tuck & McKenzie, 2015, p. 36). Despite providing theoretical foundations and pertinent information on the research site, several students struggled to relate these components to their observations. Integrating this information in sensory exercises and actively stimulating reflections that link individual experience to structural analysis seems thus a critical requirement when applying sensory methodologies in urban planning.

We might ask if sensory encounters in urban space are enough to change attitudes towards manufacturing as well as consumption patterns and production processes themselves. Long and branched value chains are at odds with a focus on consumer awareness that places greater value on local products with transparent and traceable origins and assumes that labour practices and environmental impact can be better regulated when production is nearby. Those ethical, social, and environmental concerns must be broadly present in local discourses. Otherwise, planning regulations and building environment changes might appear unrelated and hard to link with social and environmental responsibility.

We thus tentatively advance the notion of *sensible production* to simultaneously make better justice to Baker's original goals and expand them. While we like the sense of pride conveyed by *conspicuous production*, we find it risky, too: what about production elements of which one cannot (and should not) be proud? Should they be hidden behind a shiny façade? In fact, this is what happens with conspicuous *consumption*. Those

who engage in this practice are primarily concerned with appearance and usually ignore the (potentially exploitative) relations that make the production of the displayed good possible. Instead, the polysemy of *sensible* is productive of an approach that not only acknowledges the materiality and multisensoriality of production but also invites us to reflect on what kind of production we want and need—a production that makes sense for people and the planet and shows good sense because it is “designed for practical ends rather than for appearance” (as in another meaning of the adjective; Sensible, n.d.). *Sensible production* cannot brag about a few selected elements but must expose its tensions and contradictions to perception, teaching us to be affected and to care for its complexity. It invites us to engage with production not as detached consumers, but as part of an interconnected collective that bears responsibility for what, where, how, how much, for whom, and why it is produced.

6. Conclusions and Outlook

Our study points to the potential of conspicuous production and mixed-use zoning for reinforcing awareness and connection between people and manufacturing. However, it also warns about considering these approaches as simple solutions to complex social and environmental problems. It emphasises the importance, for urban planning research and practice, of differentiating *what type* and *what elements* of production processes are made more visible, perceptible, and accessible, as well as of considering the social, cultural, and political peculiarities that shape relations to manufacturing in each local context and for different social groups. We propose *sensible production* as a concept that invites us to acknowledge the complexity of production and consumption relations and take responsibility for them.

(Sensory) planning risks resulting in ineffective (or even counterproductive) interventions if it remains blind to structural settings (e.g., labour market conditions) and broader spatial arrangements (e.g., mobility patterns). Motorised mobility strongly affected our experience of Mendrisio's sensescapes, while most of our positive encounters related to natural elements, such as green spaces, the river, or birds. An approach that aims at more production visibility without simultaneously actively working to reduce the presence of cars seems thus to be destined for little success. At the same time, increased attention to the design not only of individual industrial buildings but also of the surrounding environment can encourage people to linger more in proximity to manufacturing, multiplying the possibilities for sensory experiences and connections. Greening interventions have proven effective in this regard (Curran & Hamilton, 2020; McKendry & Janos, 2015). Other strategies could include a focus on soft mobility (Valente et al., 2021) or the integration of additional functions in the industrial and mixed-use zones (like sports facilities, shops, or restaurants), paying, however, attention that

this does not result in the displacement of manufacturing activities (Curran, 2007).

Our research applied sensory methodologies to go beyond the analysis of functional and visual elements of industrial production and towards embodied human experiences. In the limited framework of our laboratory, we could only explore the usefulness of a multi-sensory approach in autoethnographic terms by interrogating our own affective transformation and its relation to conspicuous production. Further research could expand the timeframe, number, and profile of people involved to assess and transform existing perceptions of urban manufacturing.

By actively encouraging the process of learning to be affected, we believe that such methodologies can complement visual and functional approaches to fulfil the social and environmental promises of conspicuous production and mixed-use zones. Sensory methods can represent a powerful tool for mobilising local communities and trigger discussions on the space and role people wish to give to manufacturing in their cities. Sensory elements can be combined with participatory activities such as community discussions, sensory walks, and any event that raises curiosity about local manufacturing activities and increases their readability in the public space. Such events could include exchanging ideas and experiences between residential and industrial communities to increase mutual understanding and care. Interventions could also more explicitly aim to transform and contest existing spatial arrangements through targeted performances. In this case, bodies would become not only receptive devices and research tools but also means of active expression (Landrin, 2022, p. 109).

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Conflict of Interests

The authors declare no conflict of interests.

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